

**Submission
No 225**

INQUIRY INTO THE STATE EDUCATION SYSTEM IN VICTORIA

Organisation: The Centre for Independent Studies

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Submission to the Legislative Council Inquiry into the State Education System in Victoria

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Introduction

The Centre for Independent Studies (CIS) is a leading independent public policy think tank in Australasia. Our work is driven by a commitment to the principles of a free and open society. The CIS is independent and non-partisan in both its funding and research, does no commissioned research, nor takes any government money to support its public policy work.

The Education Program at CIS has long promoted reform in the Australian education sector, recommending evidence-based policy designed to facilitate a high-quality teacher workforce and improved student outcomes. To this end, CIS has produced various papers relevant to this inquiry, including:

- Starting Off on the Wrong Foot: How to improve Initial Teacher Education in Australia (August 2023);
- Teacher Workforce: fiction vs fact (March 2022);
- Why Inquiry-based Approaches Harm Students' Learning (August 2021);
- Myths That Undermine Maths Teaching (August 2022);
- Teaching Behaviour: How classroom conduct can unlock better learning (September 2023); and
- Conduct Becoming: The importance of the behaviour curriculum (October 2023).

This submission will focus primarily on addressing sections 1, 2, 3 and 5 of the Committee's Terms of Reference and the associated subsections. We note that this inquiry focuses on government schools. Where possible, data and research relevant to only the government sector have been referred to, but much reporting, particularly of international testing data, is done for all Victorian schools.

Contents

Terms of Reference item	Report sections
1) Trends in student learning outcomes from Prep to Year 12, including but not limited to: a) The factors, if any, that have contributed to decline; and b) disparities correlated with geography and socio-economic disadvantage.	1-3
2) the state of the teaching profession in Victoria, including but not limited to: a) the adequacy of existing measures to recruit and retain teachers; b) training, accreditation and professional development; c) the adequacy of the Department of Education's measures to support teachers; and d) the impact of school leadership on student wellbeing, learning outcomes and school culture.	4-7
3) the current state of student wellbeing in Victoria, including but not limited to: the impact of State Government interventions, following the onset of the COVID-19 pandemic, to address poor mental health in students, school refusal, and broader student disengagement.	8-9
5) examples of best practice in other jurisdictions and educational settings used to improve student learning outcomes and wellbeing.	Throughout as relevant

Submission overview: key takeaways and recommendations

1) Victoria has many advantages in terms of funding and demographic context

2) International testing shows stagnation and decline

3) A thorough examination of national testing data shows that Victoria is not achieving its potential

4) Overall teacher supply exceeds demand, but more could be done to attract and retain teachers in certain locations and specialisations

- Recommendation 1: Provide regional and sub-regional data about vacancies in a more accessible format to both inform policy and empower teachers looking for their next opportunity.
- Recommendation 2: Evaluate new and existing measures to address teacher workforce issues in Victoria, and publish the findings of these.

5) Current regimes of accreditation and ongoing professional development are not fit for purpose

- Recommendation 3: Remove the VIT model of inquiry cycle-based accreditation and move towards a model based more strongly on teaching capacity measured through observations and structured professional learning.
- Recommendation 4: Develop a series of professional learning modules for early career teachers that build on the foundations of ITE (namely, the core content requirements under development by TEEP) and align this with accreditation.
- Recommendation 5: Review the employer requirements of the 'Permission to Teach' category to get subject matter experts into schools faster.
- Recommendation 6: Review options for VIT/ITE cooperation to further streamline attainment of provisional registration for Victorian graduate teachers.
- Recommendation 7: Revise the VIT requirements for graduate teachers seeking full registration to be in line with NSW.
- Recommendation 8: Review ongoing professional development opportunities and external accountability requirements (PDP, SOE, annual VIT registration) to align with the evidence on appraisal methods that have a direct bearing on teacher quality.
- Recommendation 9: Review Victoria's professional learning requirements in line with other recommendations made in this submission to maximise impact of 20 hours of professional learning.
- Recommendation 10: Utilise England's Early Career Framework — as well as its underlying research base — to review professional development frameworks and programs for graduate, early career and mid-career teachers; including the new Career Start Initiatives and the relatively new Victorian Academy for Teaching and Leadership.
- Recommendation 11: Examine the model of evaluation-based approaches to ongoing professional development and accreditation and examine its feasibility for Victoria.
- Recommendation 12: Examine the models of performance-based pay and their feasibility for Victoria.

6) Pedagogical guidance provided to schools is inconsistent in its alignment with best practice

- Recommendation 13: Revise FISO to re-emphasise student academic achievement and position wellbeing as a product of achievement rather than its precondition.
- Recommendation 14: Remove the Practice Principles from the VTLM.

- Recommendation 15: Revise the content of the HITS, perhaps replacing the list with Rosenshine’s principles, and present the revised strategies in line with a new Pedagogical Model.
- Recommendation 16: Provide more explicit materials such as unit plans and scope and sequences that show how HITS can be implemented over a series of lessons, not simply in a single one.
- Recommendation 17: Replace the Pedagogical Model with more explicit guidance on how to structure lessons, units and sequences, potentially based on the current work of the Australian Education Research Organisation, which more closely reflects the latest developments in learning science.
- Recommendation 18: In line with Recommendations 13-17, revise pedagogical guidance to clearly align with evidence-based explicit teaching practices.
- Recommendation 19: In line with Recommendation 29, analyse Attitudes to School survey data and publish this as a report to help track use of effective teaching practices.

7) More support could be provided from the system to promote effective practices

- Recommendation 20: Adopt the science of reading as the foundation of early reading instruction and follow the South Australian Government’s Literacy Guarantee model to shift practice of Victorian teachers.
- Recommendation 21: Incorporate the already available and free Literacy Hub Phonics Screening Check into the mandatory assessment schedule.
- Recommendation 22: The VCAA should make it a priority to create a full suite of explicit instruction-based instructional materials, from whole-school plans for learning down to lesson-level resources, aligned to the Victorian Curriculum.
- Recommendation 23: Where VCAA or related government bodies are unable to do this work, teachers and schools should be directed to organisations such as Ochre to find curriculum materials based on the explicit instruction methods.
- Recommendation 24: Change the Tutor Learning Initiative guidelines to clarify that in-class differentiation at Tier 1 is not an example of a Tier 2 intervention.
- Recommendation 25: Publish any and all evaluations that relate to the Tutor Learning Initiative to gain a clearer understanding of what models are successful.

8) A proactive approach to behaviour and classroom management can help promote student wellbeing

- Recommendation 27: Mandate the explicit teaching of behaviour in all Victorian schools, whether that is through the Victorian Curriculum or another system-wide initiative.
- Recommendation 28: The Department should create a set of ‘Culture Principles’ that provide guidance to schools about how to create durable whole-school approaches to behaviour for learning. This should be integrated into the Victorian Teaching and Learning Model.

9) Data about the wellbeing and school experiences of Victorian students is insufficiently transparent

- Recommendation 29: Attitudes to School Survey data should be reported in full by Local Government Area, similarly to the current reporting mechanism for VCAMS.

1) Victoria has many advantages in terms of funding and demographic context

Real all-government recurrent spending (including the user cost of capital), for Victorian government schools grew by approximately 41%, from \$8.4 billion in 2010-11 to \$11.9 billion in 2019-20. By contrast, over the same period, spending for all of Australia increased from \$40 billion to \$53 billion, a growth rate of 31%.¹

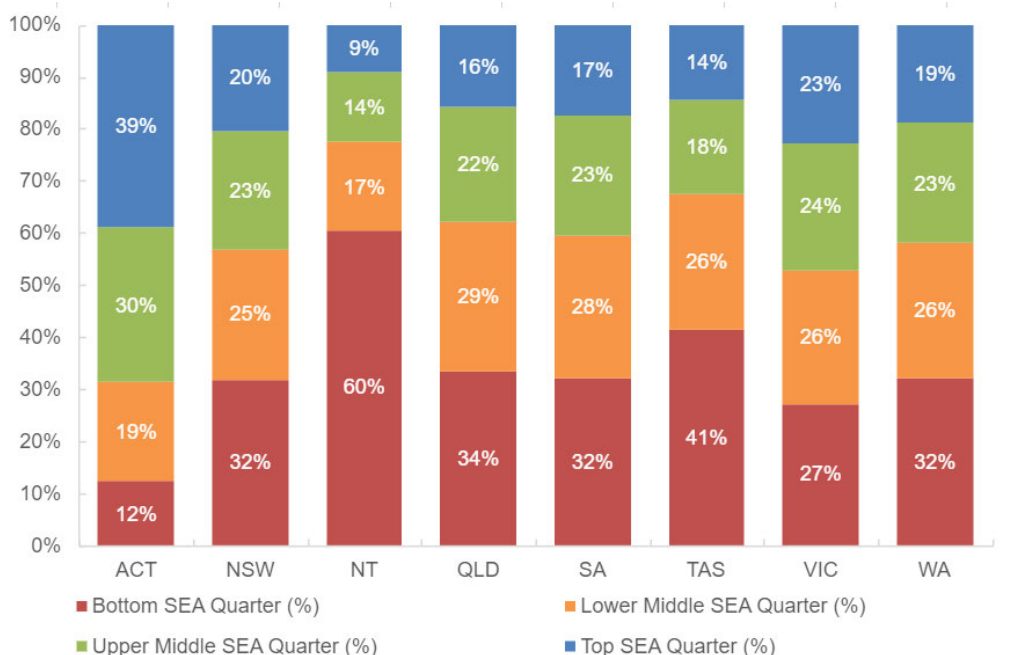
Real all-government recurrent spending (excluding the user cost of capital) *per FTE student* in Victorian government schools increased by approximately 20%, from \$15,620 in 2010-11 to \$18,668 in 2019-20. By contrast, nationwide this sum grew by 16% over the same period, from \$17,424 to \$20,182.²

In addition to increases in government school funding, Victoria is more demographically advantaged than most other Australian states and territories. A lower proportion of Victorian government school students have low SEA (socio-educational advantage) status than most other Australian jurisdictions and the national average.

The annual Report on Government Services reports on the proportion of all enrolled students with low SEA status in all Australian jurisdictions. The SEA is generated from parent data provided upon school enrolment and covers parent occupation, school education level and non-school education level. Latest available data from 2020 shows 22.8% of all enrolled Victorian students have low SEA status, rising to 27.5% for government school students only. The national average is 24.9% and 30.8% respectively.³

ACARA's school profile data from 2022, which incorporates all school sectors, shows Victoria is the most advantaged state in the nation: it has the second-lowest proportion of students in the bottom SEA quarter and the second-highest proportion of students in the top SEA quarter. It also shows the two jurisdictions with the most similar demographic makeup to Victoria are NSW and Western Australia, though both have a higher proportion of bottom SEA quartile students than Victoria.

Figure 1: Share of students according to SEA quartile, all Australian states and territories, 2022



This context is important when considering the learning outcomes of Victoria's students.

2) International testing shows stagnation and decline

Programme for International Student Assessment

The Programme for International Student Assessment (PISA) run by the OECD tests 15-year-old students across three domains: Reading Literacy (since 2000), Mathematical Literacy (since 2003) and Scientific Literacy (since 2006). The below data is from the most recent round of PISA testing (2018) and includes all Victorian schools, not just government schools. Australia's PISA results are reported by the Australian Council for Educational Research (ACER).

Reading: Victoria's mean score in 2018 was above the OECD average, along with most other Australian jurisdictions. Since 2000, ACER reported there was no statistically significant change in the mean score between 2000 and 2018, no statistically significant change in the proportion of low- and high-performers and a 'gradual decrease' in the proportion of students reaching the national proficient standard: 62% in 2018.

Mathematics: Victoria's mean score in 2018 was similar to the OECD average. Since 2003, all jurisdictions declined in performance, but Victoria's decline of 14 points — equivalent to half a year of schooling — was the smallest. The proportion of Victorian students in the high-performing band declined by 4 percentage points and the change in the proportion of low performers was deemed not statistically significant. Overall, between 2003 and 2018, the proportion of students attaining the national proficient standard declined by 6 percentage points to 56%.

Science: Victoria's mean score in 2018 was above the OECD average, along with most over Australian jurisdictions. Since 2006, ACER reported no statistically significant change in the mean score, no statistically significant change in the proportion of low- and high-performers, and no change in the proportion of students reaching the national proficient standard: 60% in 2018.

Progress in International Reading Literacy Study

The Progress in International Reading Literacy Study (PIRLS), run by the International Association for the Evaluation of Educational Achievement (IEA), tests students in Year 4 on Reading Literacy. Like PISA, Australia's PIRLS results are reported by ACER and the most recent round of testing was in 2021.

The 2021 testing round showed 16% of students did not meet international benchmarks in Victoria, which was the second-lowest in the nation and compares to 20% of students not meeting this standard nationwide. 13% of Victorian students achieved the Advanced benchmark, compared to 14% nationally. If we look solely at the proportion of high performers, Victoria's 13% is just above the 12% in South Australia and the Northern Territory.⁴

Victoria's performance over time is also inconsistent. While Victoria's mean score increased at a statistically significant level between 2011 (the first round of testing) and 2016, it then decreased at a statistically significant level between 2016 and 2021. No other jurisdiction experienced a statistically significant decrease in their mean score between 2016 and 2021.⁵ ACER notes this decline should be considered alongside the decrease in students performing at the higher level — 19% of Victorian students performed at the Advanced benchmark in PIRLS 2016, but in 2021 this was only 13%.⁶

Both PIRLS 2021 and trends over time suggest Victoria is able to minimise low performers, but is not able to generate as much high performance as other jurisdictions. This is concerning when seen in the context of Victoria's demographic advantages; which indicates many Victorian students are not achieving their potential.

Trends in International Maths and Science Study

The Trends in International Maths and Science Study assesses students in Year 4 and Year 8 on both Mathematics and Science. Like PIRLS, it is conducted by the IEA, first in 1995. The latest results are from 2019 and are, again, reported by ACER.

Year 4 Mathematics: Victoria's mean performance was on par with NSW and the difference with other jurisdictions was not statistically significant, with the exception of South Australia and the Northern Territory, which did not perform as well.⁷ Similarly, 72% of students were at or above the National Proficient Standard (NPS) in both NSW and Victoria, with the national average 70%.⁸ While NSW, Queensland and Western Australia improved the proportion of students achieving the NPS since the first round of testing in 1995 (albeit from a lower bar), Victoria has not.⁹

Year 4 Science: Victoria's mean performance was on par with NSW and close to the national average, with no statistically significant differences between the larger states.¹⁰ Similarly, 80% of students were at or above the NPS in Victoria, compared to 79% in NSW and a national average of 78%.¹¹ While Queensland and NSW improved significantly since 1995 in the proportion of students reaching the NPS, other states — including Victoria — did not.¹²

Year 8 Mathematics: Victoria's mean performance was below NSW and close to the national average, but not statistically significantly different from other jurisdictions except Tasmania and the NT.¹³ 67% of Victorian students met the NPS, equal to Queensland but below NSW (72%) and about the same as the national average of 68%.¹⁴ The proportion of students attaining the NPS in Victoria has not significantly changed since 1995.¹⁵

Year 8 Science: Victoria's mean performance was below NSW, on par with the national average and not statistically significantly different from most states and territories.¹⁶ 73% of Victorian students met the NPS, compared to 77% in NSW and 74% nationally.¹⁷ This represented a significant improvement from 1995, when only 64% of students met the NPS.¹⁸ Similarly, Victoria's proportion of very low achievers decreased and its proportion of very high achievers increased since 1995, in contrast to other jurisdictions which lacked statistically significant changes.¹⁹

3) A thorough examination of national testing data shows that Victoria is not achieving its potential

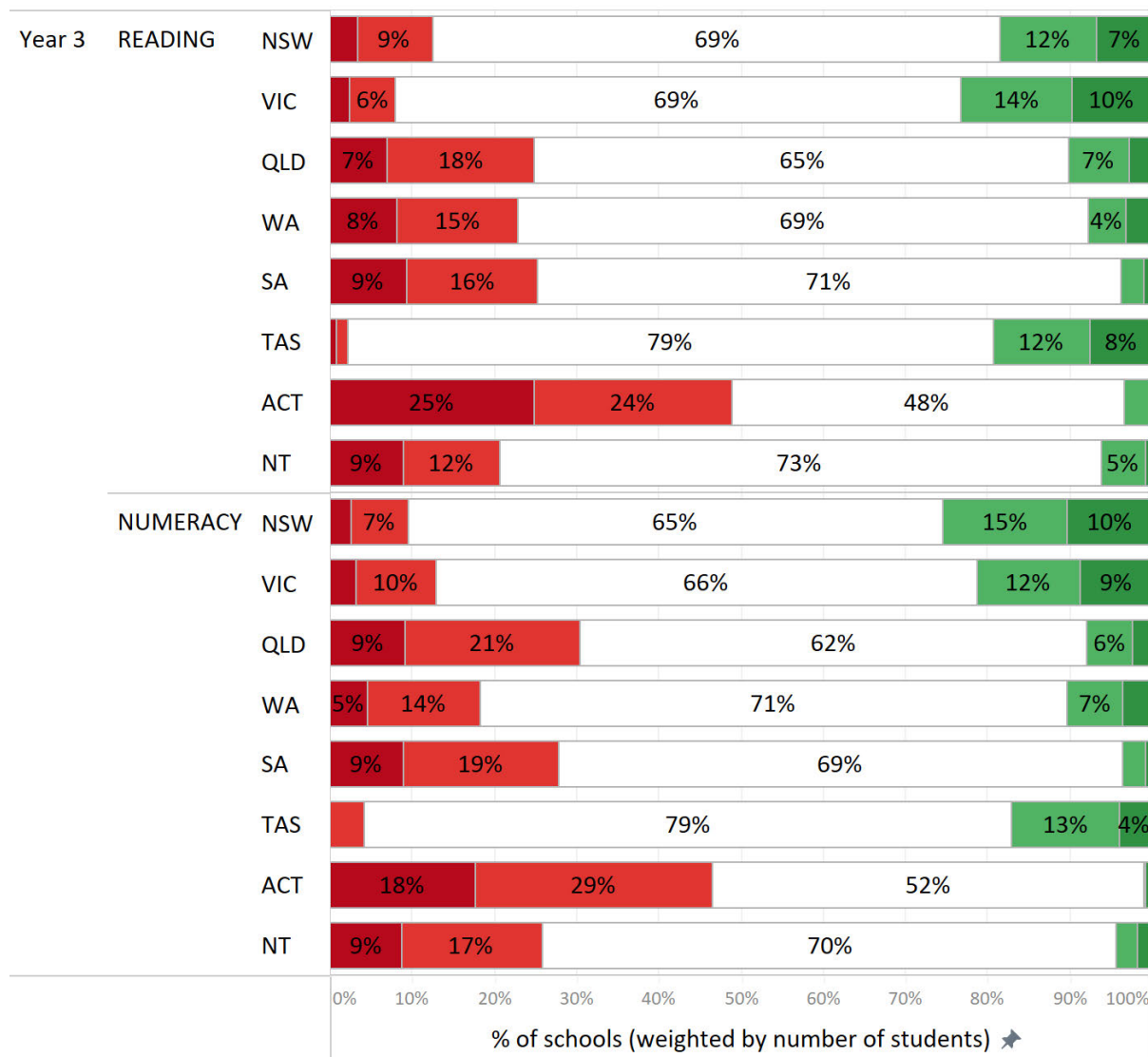
ACARA's 'similar schools' measure can be used to see what proportion of schools in each jurisdiction perform at a level below, close to, or above schools with a similar ICSEA scores. This provides a way of reporting NAPLAN data while adjusting for relative levels of disadvantage between the Australian states and territories. This is given below for Year 3 (Figure 2) and Year 9 (Figure 3).

At Year 3, about 1 in 10 Victorian primary schools are performing below or well below similar schools in Reading — a proportion lower than any other jurisdiction except Tasmania. Victoria also has about a quarter of schools delivering results above or well above similar schools, with the balance performing at a level close to similar schools.

However, the picture is less positive when it comes to Year 3 Numeracy. A higher proportion of schools perform below or well below similar schools compared to NSW and, correspondingly, a smaller proportion perform above or well above — 21% compared to 25% in NSW.

Figure 2: Comparison of Year 3 NAPLAN Reading and Numeracy to similar students, across all states 2019-22

COMPARISON OF NAPLAN RESULTS TO SIMILAR STUDENTS, ACROSS ALL STATES 2019-22



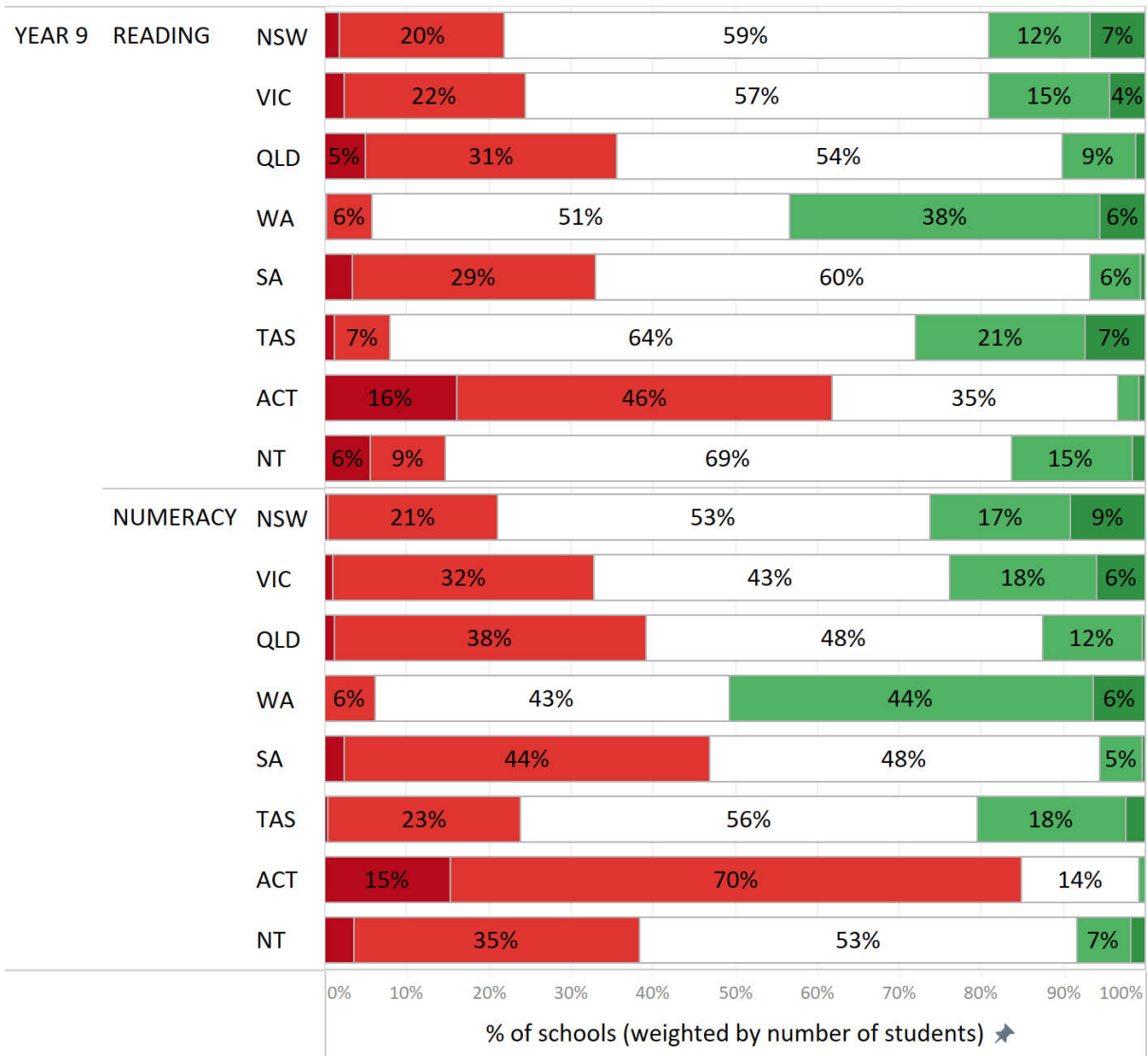
Colour Comparison to Similar Students

- Dark Red = Well below
- Light Red = Below
- White = Close to
- Light Green = Above
- Dark Green = Well above

Excludes 'Not applicable' schools. Source: ACARA MySchool

At Year 9, the picture is very different. WA, Tasmania, the NT and NSW all have lower proportions of schools performing below or well below similar schools than Victoria for Year 9 Reading, with about one in four schools in Victoria underperforming on this measure. In Numeracy, Victoria is similarly in the middle of the pack, with a third of schools performing below or well below similar schools.

COMPARISON OF NAPLAN RESULTS TO SIMILAR STUDENTS, ACROSS ALL STATES 2019-22



Colour Comparison to Similar Students
 ■ Dark Red = Well below ■ Light Green = Above
 ■ Light Red = Below ■ Dark Green = Well above
 □ White = Close to

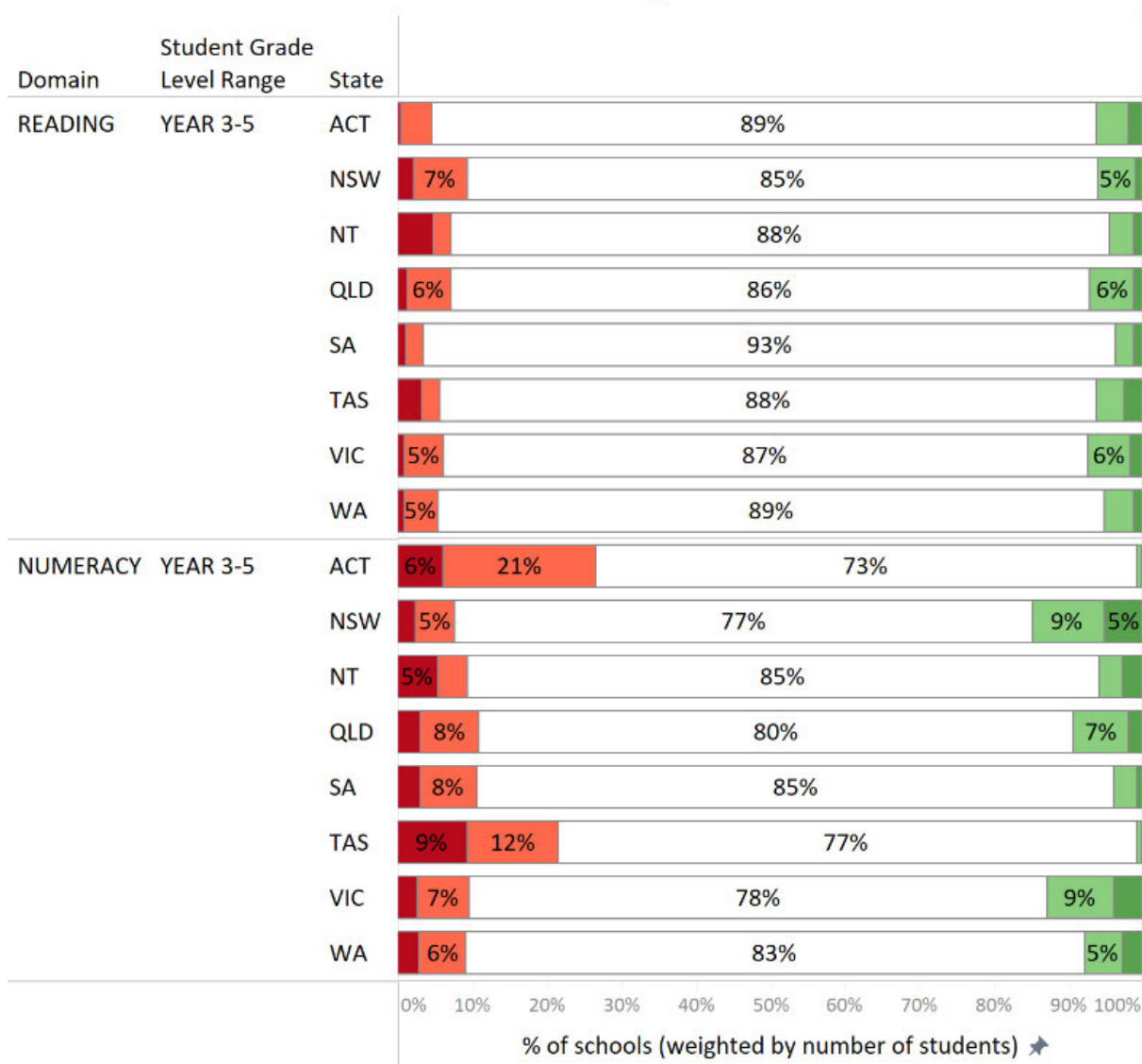
Excludes 'Not applicable' schools. Source: ACARA MySchool

Another measure is to compare Victorian students’ progress in NAPLAN to that of other jurisdictions, again using the ACARA ‘similar schools’ measurement to adjust for demographic advantages.

Figure 4 shows the vast majority of students progress in Reading between Year 3 and Year 5 in line with similar students, regardless of jurisdiction. However, Numeracy progress is much more diverse and higher proportions of students are below the level of progress of similar students across all jurisdictions compared to Reading. This data also show a small but distinct advantage for Numeracy progress in NSW, with a smaller proportion achieving below similar students and a much larger proportion — 14% — achieving above similar students.

Figure 4: NAPLAN progress between Years 3 and 5 in Reading and Numeracy compared to similar students, all Australian jurisdictions

COMPARISON OF NAPLAN PROGRESS TO SIMILAR STUDENTS, BY STATE



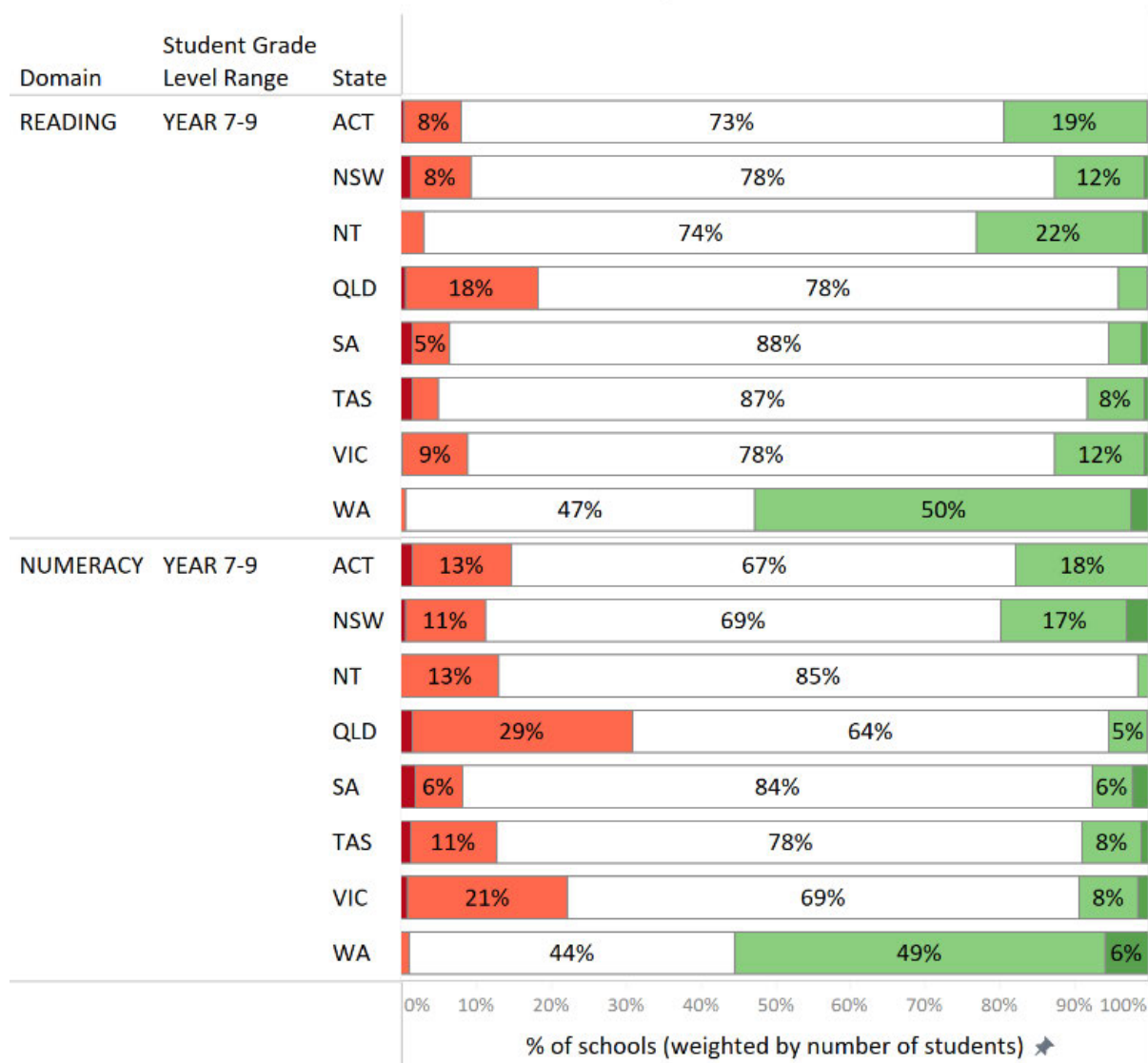
Colour Comparison to Students with Similar ICSEA and Same Starting Scores
 ■ Dark Red = Well below □ White = Close to ■ Dark Green = Well above
 ■ Light Red = Below ■ Light Green = Above

Average across 2018-2021 weighted by # of students, Australia-wide. Excludes 'Not applicable' schools. Source: ACARA MySchool

Figure 5 shows NAPLAN Reading progress between Year 7 and Year 9 is almost the same for Victorian students as for NSW students. However, like overall achievement at Year 9 depicted in Figure 3, Numeracy progress is much weaker. Over one in five Victorian schools is delivering progress below that of similar schools — the second highest in the nation and much higher than demographically-similar states of WA and NSW. The proportion achieving above similar schools is also much lower than those states.

Figure 5: NAPLAN progress between Years 7 and 9 in Reading and Numeracy compared to similar students, all Australian jurisdictions

COMPARISON OF NAPLAN PROGRESS TO SIMILAR STUDENTS, BY STATE



Colour Comparison to Students with Similar ICSEA and Same Starting Scores

■ Dark Red = Well below White = Close to ■ Dark Green = Well above
■ Light Red = Below ■ Light Green = Above

Average across 2018-2021 weighted by # of students, Australia-wide. Excludes 'Not applicable' schools. Source: ACARA MySchool

This analysis is important for two reasons: firstly, it clearly shows that despite frequent claims that Victoria is at or near 'top of the class' on NAPLAN,²⁰ a more detailed analysis of achievement and progress shows Victoria is closer to the middle of the pack; secondly, it shows performance in Numeracy is a clear and consistent concern — with Reading showing more progress than Numeracy — in Victorian schools, regardless of the year level.

NAPLAN 2023²¹

In 2023, the scaling and reporting methods for NAPLAN both changed, creating a new time series for data and rendering it not comparable to the previous rounds of NAPLAN to 2022. Rather than reporting results in bands and creating a benchmark of a (low) National Minimum Standard, NAPLAN 2023 reported results in four bands, from lowest to highest: Needs Additional Support, Developing, Strong and Exceeding. Students in the band Strong or above are considered proficient.

Figure 6 shows that one in four students are not meeting a proficient benchmark in NAPLAN Reading in Year 3; a higher proportion than suggested in PIRLS 2021. Despite the optimistic picture in Figure 2 and 4, this year's results highlight the importance of a consistent and systematic approach to early literacy development to prevent such significant numbers of students falling behind in the first instance.

Consistent with Figure 3 and PISA 2018 Reading results, Figure 6 shows about one in three Year 9 students do not meet the Proficient standard.

Figure 6: Proportion of Victorian students not meeting the Proficient benchmark, NAPLAN Reading, 2023

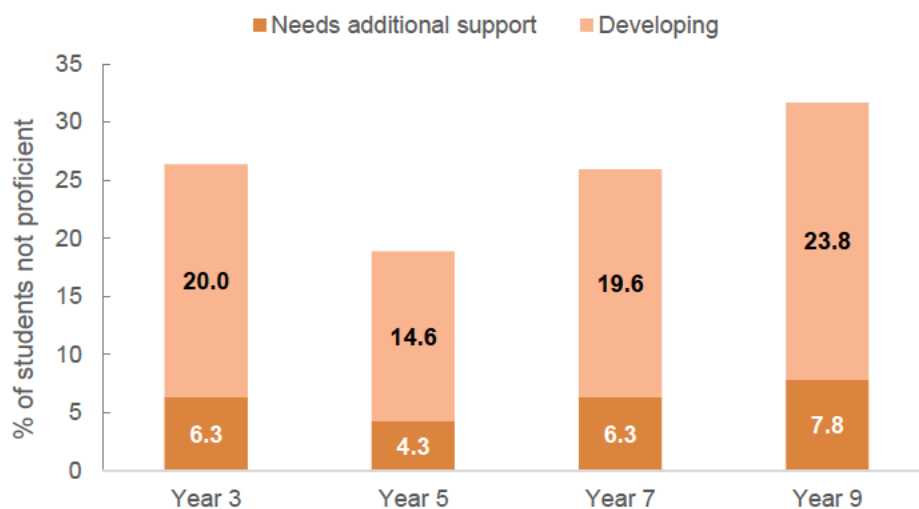
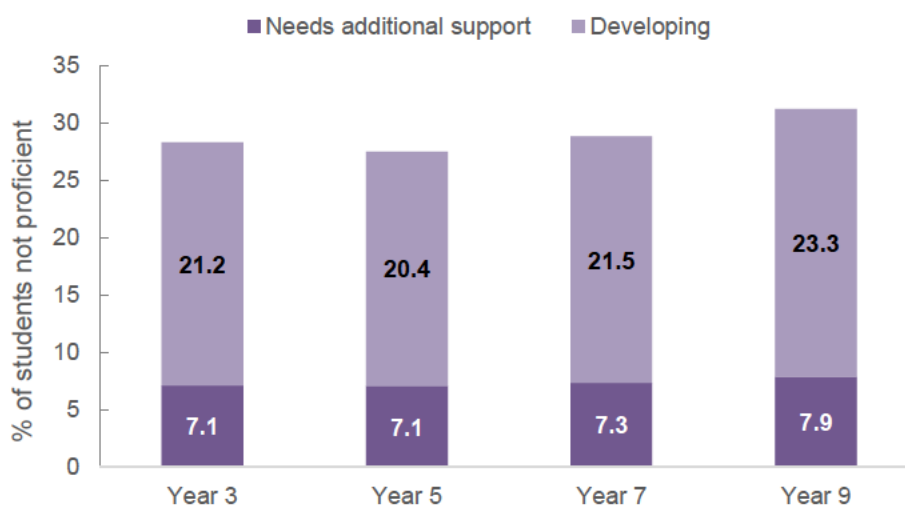


Figure 7 supports the picture of Mathematics capacity shown in PISA, TIMSS and demographically adjusted NAPLAN comparisons from earlier cohorts: lower Mathematics achievement than Reading achievement is evident at each year level except Year 9, where it is even.

Figure 7: Proportion of Victorian students not meeting the Proficient benchmark, NAPLAN Numeracy, 2023



One possible response to this NAPLAN 2023 data is to argue it is incomplete without comparisons to other jurisdictions. However, there is no reason to believe demographically-adjusted student achievement would be different in 2023 to the data considered in Figures 2-5. There is another reason this data should be taken at face value: it clearly shows that at all year levels (and the proportion increases from Year 5 onwards) 20-30% of students are not achieving at the standard they should for their year level. Though here we are looking at percentages and high-level figures, each of these figures represents thousands of Victorian children who are not making the progress they should.

As recent NAPLAN analysis from both the Productivity Commission and AERO shows, if these students are behind to start with, it becomes increasingly difficult for them to catch up: fewer than one in five students who are behind in Year 3 catch up and stay caught up.²² Moreover, NAPLAN achievement is widely recognised as a reliable predictor of VCE/HSC achievement.²³ As a consequence, it is imperative that government policy focuses on equipping teachers with the best chance of student success by minimising the number of students that fall behind in the first instance — in addition to the current policy focus of trying to help those that fall behind in later years.

4) Overall teacher supply exceeds demand, but more could be done to attract and retain teachers in certain locations and specialisations

It is accepted wisdom that there is a teacher shortage and retention crisis. However, many statistics that purport to show the extent of this are not based on the best available data. This section will examine teacher recruitment and retention at a national level and against other occupations, and then use Victoria-specific data for government schools. Two key resources here are the Victorian Teacher Supply and Demand Report 2021 and AITSL's analysis of national Australian Teacher Workforce Data.

To keep teacher recruitment and retention issues in perspective in Victoria, it is necessary to make a few observations. Teacher shortage and retention concerns are evident across multiple countries and, even within Australia, there are shortages in multiple industries — especially as the labour market has been unusually tight. Not only that, younger generations of workers are much more likely to change careers multiple times throughout their working lives regardless of the industry in which they work. AITSL notes that “[t]his mobility in employment means it is less likely for people to choose a career as young adults and remain in one profession until retirement.”²⁴ Accordingly, 35% of the teacher workforce in 2022 reported they do not intend to remain in teaching until retirement, which is in line with the broader workforce. While there have been increases in the proportion reporting they would leave within the next year and those reporting a desire to leave within 2-4 years, AITSL notes that ‘intention to leave’ does not necessarily result in actual attrition. Because of these general trends as well as Victoria-specific data, the evidence does not support a simplistic or across-the-board strategy to attract and retain teachers.

What and where are teacher shortages?

There is no overall shortage of teachers, at least in primary school. But some high-growth areas of Melbourne and many regional areas experience recruitment challenges, as measured by a combination of vacancy rate, application rate, no-appointment rate and attrition rate. Brimbank Melton and Hume Moreland are the two metropolitan areas that feature most heavily in these

metrics, as well as Wimmera South West, Mallee and Outer Gippsland for regional areas. Additionally, Goulburn experiences challenges in secondary school but not in primary school.

Overall total primary vacancies* increased to 8,996 in 2021 from 6,214 in 2020 — an increase of 45%. However, recruitment concerns are especially evident in certain education regions when compared to others:

- High vacancy rates (vacancies per 10 staff): 4.7% in Brimbank Melton, 4.7% in Western Melbourne, 4.4% in Hume Moreland and 4.4% in Wimmera South West;
- Low application rate (applications per vacancy): 3.2 in Mallee, 4.1 in Outer Gippsland, 4.9 in Wimmera South West;
- No-appointment rate (proportion of vacancies that went unfilled): 20% in Brimbank Melton, 21% in Hume Moreland, 27% in Mallee, 23% in Outer Gippsland; and
- Attrition rate: 4.2% in Hume Moreland, 4.8% in Outer Gippsland, 4.9% in Wimmera South West, 4.4% in Western Melbourne.

Overall secondary vacancies increased from 5,197 vacancies in 2020 to 7,661 vacancies in 2021 — an increase of 47%. Below are key indicators for secondary government schools:

- High vacancy rates (vacancies per 10 staff): 5.5% in Goulburn, 4.9% in Hume Moreland, 5.2% in Mallee, 4.6% in Outer Gippsland;
- Low application rate (applications per vacancy): 2.5 in Goulburn, 2.3 in Mallee, 2.4 in Outer Gippsland, 2.7 in Ovens Murray;
- No-appointment rate (proportion of vacancies that went unfilled): 34% in Brimbank Melton, 43% in Goulburn, 42% in Mallee, 32% in Outer Gippsland; and
- Attrition rate: 7.7% in Goulburn, 6.3% in Outer Gippsland, 5.4% in Ovens Murray and 5.7% in Wimmera South West.

There are also subject-specific concerns. While English and Maths secondary specialisations are advertised in similar numbers (1,553 and 1,509 respectively, or 16% of total roles advertised with a specialisation), the no-appointment rate was higher for Mathematics at 27% compared to 22% for English. Science represented 13% of specialisations advertised and had a 26% no-appointment rate.

b) Are schools increasingly relying on Permission to Teach authorisations[†] to fill staff gaps? No. The number of PTTs fluctuates from year to year, but in 2021, the authorisations was similar to 2019, and some previous years saw higher numbers of authorisations.

c) Are registered teachers increasingly choosing not to work as teachers? No. The number of registered teachers not employed was 40,751 in 2021, which does represent an increase from 2020's figure of 39,426, but it is lower than each year in the period 2015 to 2019. 36% of this pool are aged 55+. However, one in five teachers leaves within the first five years; 15% leave in their second or third year.

d) Is there a looming teacher shortage? According to the Victorian Teacher Supply and Demand Report, probably not for primary, but there are some potential workforce challenges for secondary. For primary-registered teachers, the total registered workforce is expected to grow by five% from 2022 to 2027 and the teachers expected to be available to teach is expected to grow by 2.6%. In

* 'Vacancy' refers to a position being open and advertised; it does not suggest the vacancy was not filled

†† Permission to Teach is an alternative authorisation to teach that exists primarily to address a workforce shortage within Victorian schools

comparison, demand is likely to grow by only 1.1%. For secondary-registered teachers, the total registered workforce is expected to grow by 14.6% 2022 to 2027 but the teachers expected to be available to teach is estimated to grow by 12%.

While it is positive that overall secondary ITE enrolments increased in 2021 to help meet the medium-term demand forecast, there is still insufficient enrolment of Mathematics and Sciences specialisations, particularly when the high no-appointment rate for those vacancies is considered: only 9% for Mathematics, 7% for Biology, 4% for general Science, and just 2% for Chemistry and Physics. Note that these only reflect specialisation in the ITE degree; they do not necessarily reflect higher study or attainment in the content of these subjects.

The picture on recruitment is therefore much more nuanced than some figures — such as 90% of principals Australia-wide having problems with recruitment²⁵ — would suggest. These data suggest it may be worth pursuing policies targeted towards addressing shortages in specific regions and specialisations, particularly for secondary school teachers. However, it is important that knee-jerk reactions, such as paying all teachers more, be avoided. 67% of Australian teachers are satisfied with their salary — a figure well-above the OECD average of 39%.²⁶ This is consistent with the average salaries of secondary teachers exceeding those in most other OECD countries²⁷ and that Australian secondary teachers' salaries have grown by 15% since 2010, compared to the OECD average of 6%.²⁸

What can be done to address teacher shortages that do exist?

Clarify the nature of teacher shortages across Victoria to help develop effective responses

As explored, the best source of data for information about teacher shortages in Victoria is the annual Victorian Teacher Supply and Demand report. However, the data included in this report is not published as regularly and as accessibly as it should be. The most recent version of the report for 2021 was not published until 2023. While it is a report rich with detail, its primary benefit is for stakeholders and policymakers. The government should also consider updating its jobs portal to show more clearly where areas of shortage are, for which specialisations, and what additional incentives may be involved for certain roles. The creation of a publicly-available heat map to communicate types of need could assist not only stakeholders and policymakers, but also teachers and would-be teachers. This would complement the government's recent announcement of the Teacher Recruitment Initiative and Job Opportunities Pool.²⁹ If initial movements in this area are successful, the work could be scaled to help connect student teachers seeking supportive teacher placement environments.

Recommendation 1: Provide regional and sub-regional data about vacancies in a more accessible format to both inform policy as well as empower teachers looking for their next opportunity.

One policy initiative to help specific shortages would be Targeted Financial Incentives (TFIs), in the form of bonuses linked to tenure. These are already available as a matter of Victorian Government policy for many positions, but have evidently not been enough to remove the difficulties in recruitment in some areas. Evidence from literature and other jurisdictions provide some indicators of what could be improved, but the impacts of many policies introduced to tackle this nationwide concern is generally mixed or not evident.

An Australian Government Department of Education review in 2021 found there were limited formal evaluations or evaluations with low quality data to support the various programs and policies in place to improve workforce in hard-to-staff schools. The review observed there is limited evidence of success of financial incentives or bursaries but noted that financial incentives, particularly in Maths

and Science, would need to be of sufficient size to compete with salaries in other fields to which those graduates might otherwise go.³⁰ Research from the University of Canberra notes many incentives for rural and remote education in particular are based on extrinsic motivators, and recommended “a better balance between compensatory incentives and those that reward professional practice.”³¹

Research also suggests an asymmetry between what teachers value and what regional, rural and remote schools value. The latter value retention of skilled staff in their school, whereas a study commissioned by the NSW Government that surveyed teachers found they most valued a guaranteed priority transfer after two years to a school of their choice, with the second-most valued incentive being a \$5,000 increase in salary per year. This study also noted that teachers with partners and/or children — usually more experienced — will factor this into their decision and were overall less likely to be interested in moving despite the incentives offered in the study.³²

Develop a unified teacher workforce strategy and evaluate initiatives to scale up success

In September 2021, the NSW Government released its Teacher Supply Strategy 2021-2031, which specified goals to a) grow the overall supply of teachers, b) encourage more teachers to train in high-need and specialist subject areas and c) provide targeted teaching support for students in the places it is needed. It contained a number of actions useful for the Victorian context:³³

- Retraining teachers, particularly those working out-of-field, to provide qualifications in skills in the area in which they are needed;
- ‘Grow Your Own’ initiatives to support and encourage young people and other members of the community who already live in rural and regional communities to pursue teaching as a study and career option; and
- Providing community induction support for teachers new to rural and regional communities so they form the social and professional ties to stay permanently.

The Education committee of the NSW Legislative Council reported on its inquiry into teacher shortages in NSW in November 2022, which considered the Strategy thus far and also made additional recommendations:³⁴

- Expand opportunities for teachers to attain in-field expertise in high demand subjects (Recommendation 3);
- Fast-tracking the existing Grow Your Own initiative (Recommendation 4)
- Support localised models of teacher training in the style of apprenticeships (Recommendation 6);
- Develop a consistent program of independent classroom observations to support evidence-based practices (Recommendation 5);
- Cooperate with the Commonwealth Government and ITE providers to develop a Masters of Teaching model which involves one year of study and one year of paid placement (Recommendation 8);
- Recognise the importance of in-field specialist teaching to student success and collect and publish detailed data on where in- and out-of-field teaching is occurring (Recommendation 9); and
- Collect detailed teacher exit interview data to better understand teacher resignation and attrition (Recommendation 16).

There is international evidence that financial incentives for teachers with subject specialisations that are in shortage or in high demand can increase supply and retention.³⁵ In the United Kingdom

(where teacher attrition and salaries are considerably worse than in Australia), a range of financial incentives have been introduced in recent years with evidence of success;³⁶ including levelling-up premium payments (available for chemistry, computing, mathematics and physics teachers) and phased bursaries for graduates, particularly for mathematics teachers. The phased bursary results, in effect, as a deferred financial incentive paid to graduates as a salary supplement (equivalent to around an 8% pay increase) in their first few years of teaching. This has also been extended with a Phased Maths Bursary (PMB) that pays an additional £5,000 or more to eligible maths teachers in the third and fifth years of their career. At least in part, this approach is intended to support STEM graduates and mid-career-changers, who often face a salary gap in teaching compared to the wider labour market opportunities. There is some evidence to suggest the phased bursary approach has assisted in not only attracting, but also retaining, maths and science teachers. Furthermore, policy evaluations show the increased investment in targeted salary supplements for early career teachers is justified by reduced attrition. The cost per additional teacher retained through this policy is 32% lower than training an equivalent replacement teacher.³⁷

The Victorian Government, along with all Australian governments, is implementing several initiatives to address the nationwide teacher workforce concerns and carry out the contents of the National Teacher Workforce Action Plan. One recent example is the decision to create a scholarship program (to support tuition fees and/or living expenses) for people studying secondary school teaching who then work in a Victorian government school for two years.³⁸ However, previous CIS research has shown that degree completion, rather than commencement, should be a bigger concern for policy.³⁹ In addition, it is important to ensure these scholarships go towards supporting students to complete their degrees and teach in government schools, rather than subsidising the decisions of students who would have done this anyway. Consequently, detailed evaluation of this and other teacher workforce strategies are required and for these reports to be made public.

Recommendation 2: Evaluate new and existing measures to address teacher workforce issues in Victoria and publish the findings of these

5) Current regimes of initial teacher registration and ongoing professional development requirements must be clarified and simplified.

Current accreditation process for teachers on provisional registration seeking full registration
In order for a teacher to achieve full registration in Victoria, they must first complete an approved Initial Teacher Education (ITE) course that contains tasks suitable for accreditation at the Graduate standard of the Australian Professional Standards for Teachers (APST). This submission will not address the content and structure of ITE courses as this is currently subject to reform by the Teacher Education Expert Panel (TEEP) and education ministers, and will not address the contents of the APST as it is managed by the Australian Institute of Teaching and School Leadership (AITSL) and thus substantially out of scope for any single state government to change.

Upon employment in a school, a teacher has two years to complete the full registration process, which consists of:

- 1) an inquiry process based on classroom teaching practice intended to demonstrate achievement at the Proficient level of the APST;

- 2) 2) to present this Professional Responsibilities Report to a workplace panel made up of fully-registered teachers to assess its suitability for the standard and submit this through the employer-access online portal; and
- 3) 3) for the VIT to process the application once the requirements have been met. The guidance for provisionally registered teachers published by the VIT is over 50 pages long.⁴⁰

It is vital to have some method of ascertaining whether new teachers are meeting the required standards for continued employment as a teacher in Victorian schools. The question is whether the current system is the most effective and efficient means of making this determination. Indeed, research suggests that classroom performance — as determined by students' reading and maths test scores — is a more reliable indicator of a teacher's future effectiveness than certification.⁴¹

The VIT states that its inquiry model is based on the work of Professor Helen Timperley. The relevant part of Timperley's work is a 2009 article titled "Using assessment data for improving teaching practice" which emphasises that assessment is the way teachers know what students know, but a systematic process — which includes evidence use and professional learning — is needed for that information to translate to improvements in teacher practice.⁴² However, there are a number of elements of this research, and VIT's adoption of the model, that call into question its appropriateness for the purpose of assessing early teaching proficiency.

The Timperley model is based on an arguably outdated model of teaching. For instance, it was based on a study of a professional development program of 300 New Zealand primary schools. Primary school teaching is structured very differently to secondary school teaching. A model of professional development appropriate for a primary teacher who works with one group of students across multiple subject areas may not be appropriate for subject-based secondary teaching where making instructional decisions based on cohort data. Indeed, given the greater emphasis in modern teaching for all kinds of teaching (early childhood, primary and secondary) on collaboration within teaching teams and consistency in curriculum and instructional decisions,⁴³ the notion of the classroom as a 'private relationship between students and a teacher' that underpins this cycle of inquiry is unfit for purpose.

The VIT's use of the inquiry cycle does not adequately take into account the critical role of evidence and professional learning. The Timperley model includes a stage of "deepen[ing] professional knowledge and refin[ing] skills", which must focus on specific teaching activities and their relationship to student learning, and also encourages teachers to consider what "sources of evidence or knowledge" can be utilised. It is clear that 'evidence' does not mean student data or anything generated internally, but relates to "discipline, curriculum and pedagogical knowledge" informing changes to practice. Timperley explicitly states that "without a thorough understanding of the theory, teachers are apt to believe they are teaching in ways consistent with the assessment information or they have promoted change in practice when those relationships are typically superficial." While the VIT's guidelines state that the inquiry process requires one to "undertake professional learning", it is to "support [one]self in implementing [the] inquiry" — in other words, the professional learning can be self-directed and is not expected to adhere to any external or objective standard of effective practice. It is intended this inquiry is guided by a mentor teacher, but this again requires a mentor teacher to themselves be aware of the right kind of professional learning needed to assist a graduate teacher with their inquiry. Because there is no explicit and clear requirement for graduate teachers to be guided through the process of using data to inform changes to teaching, it is difficult to argue any evidence they collect as part of the inquiry, or reflections they generate, demonstrate real proficiency.

The Timperley model is not designed for assessing the proficiency of graduate/early career teachers. The article does not at any point indicate the model is appropriate for use for early career teachers, much less that it is fit for a purpose of generating evidence that someone has met a proficient teacher standard. In fact, it specifies that “[i]t typically takes one to two years, depending on the starting point, for the professional learning to deepen sufficiently to make a difference to student outcomes.” If this is the case, then the only learning being done here is how to partially apply a cycle of inquiry — which makes this essentially a repetition of a Teaching Performance Assessment completed in ITE. Moreover, while the Timperley model focuses on a change in practice to generate improvement in student outcomes, the VIT inquiry guidance states: “the [inquiry] model itself will not move your practice, rather it gives you the means to demonstrate your proficiency.” This is a fundamental contradiction.

Recommendation 3: Remove the VIT model of inquiry cycle-based accreditation and move towards a model based more strongly on teaching capacity measured through observations and structured professional learning.

Recommendation 4: Develop a series of professional learning modules for early career teachers that build on the foundations of ITE (namely, the core content requirements under development by TEEP) and align this with accreditation.

Box 1: Final Report of the Review of the Victorian Institute of Teaching (December 2017)

In 2017, the Minister commissioned an independent review of the VIT on the basis that he had “become concerned that some decisions made by the VIT do not reflect community expectations” — referring largely to issues concerning suitability to teach with reference to particular professional conduct. The Terms of Reference focused specifically on ensuring “the safety and protection of children.”⁴⁴ With such a significant duty of ensuring that all teachers registered to teach in Victoria do not pose a risk to children, the VIT does important work.

Nevertheless, it should be acknowledged there is no concern around suitability and professional conduct for the vast majority of teachers, and they therefore have two types of interactions with VIT: initial accreditation (and reaccreditation if required), and the annual administrative fee to maintain registration — for which the return is by no means clear. The appropriate delineation of duties between the Department of Education and associated agencies, including the VIT, should be investigated to ensure that the VIT is meaningfully and positively contributing to professional growth of the teaching profession.

Follow the lead of NSW to reduce the administrative burden on new teachers

As explored in Section 5, Victoria’s system of providing initial and ongoing accreditation to teachers is cumbersome, involves duplication and is not directly related to enhancing teacher capacity through targeted professional development. Methods to enhance teacher capacity used in other jurisdictions are discussed in sections 10 and 11, and this section will focus on clarifying and simplifying the current framework.

Similar to Victoria’s Permission to Teach category, people finishing their ITE degree or with a degree in a relevant field can in NSW attain Conditional registration — but the barriers to entry in Victoria are higher than those in NSW. In both states, the Conditional/PTT status can be given if the

prospective teacher's degree covers discipline knowledge relevant to the subjects or disciplines in which they are employed to teach.⁴⁵ However, in Victoria, such a person could only be employed after the employer has first provided information to the VIT about why a registered teacher was unable to be recruited.⁴⁶ Given the workforce concerns outlined in Section 4, it is unclear why this barrier exists — as foundational identity and criminal records checks are carried out at all levels of registration regardless.

Recommendation 5: Review the employer requirements of the 'Permission to Teach' category to get subject matter experts into schools faster.

Like Victoria, NSW's basic level of teacher accreditation for those who have completed their initial teacher education — which involves attainment of the 'graduate' standard of the Australian Professional Standards for Teachers — is called 'provisional registration'. This is a fairly straightforward process, but a NSW parliamentary committee also recommended that the Approval to Teach process/attainment of provisional registration be further streamlined by aligning NESA's approval process with information held by ITE providers, so students are not providing the same set of documentation such as transcripts multiple times.⁴⁷

Recommendation 6: Review options for VIT/ITE cooperation to further streamline attainment of provisional registration for Victorian graduate teachers.

In NSW, the process for Proficient Teacher accreditation — which, like the Victorian equivalent, requires demonstration of the Proficient standard of the APST — is much simpler than the inquiry process outlined above. In NSW, graduate teachers seeking Proficient accreditation complete an online Proficient Teacher Accreditation course at some stage throughout the process, be observed by their Accreditation Supervisor who must provide an observation report of the teacher's practice and provide five to eight items of annotated documentary evidence of the teacher's practice. Collectively, the evidence must be annotated to demonstrate the Proficient level of each of the seven APST standards. These latter documents must be provided to NESA via an online platform. In addition, the Accreditation Supervisor and the principal then collaborate to declare and recommend to NESA the teacher's suitability for registration.⁴⁸ Though the basic requirements for Proficient/Full registration are similar in both states, the requirement in Victoria to complete a whole inquiry process versus five to eight annotated pieces of evidence in NSW makes the process in Victoria much more cumbersome and with no demonstrable impact on teaching quality.

Recommendation 7: Revise the VIT requirements for graduate teachers seeking full registration to be in line with NSW.

Ongoing professional development

This section will address professional growth opportunities and requirements in place for Victorian government schoolteachers.

Observation as a tool for growing teachers is underutilised and insufficiently supported.

The accreditation requirements for graduate teachers in Victoria specifies that observation (of the graduate teacher by a mentor teacher) must be undertaken three times as part of the inquiry process⁴⁹ but observation by graduate teachers of others is also recommended. Similarly, the Department of Education provides guidelines for schools to use around peer observation and

feedback, including the advice that observation should be informed by the school-based Strategic Plan/Annual Implementation Plan.⁵⁰

However, the extent to which schools adopt observation and the nature of those observations is essentially a school-based decision for their staff (other than those undergoing VIT accreditation). While instructional leadership roles exist, such as the Leading Teacher and Learning Specialist roles, to what extent their job includes observation (either completing them or being the subject of them) is left up to the school. A research paper based on Cincinnati Public Schools' Teacher Evaluation System notes that classroom observation-based evaluations (COBE) of teachers have the capacity to drive changes in performance through improved skills and finds that COBE improved the performance of mid-career teachers, and students of teachers who participated in that program score slightly higher in mathematics than the same teacher before participating in TES.⁵¹

The benefit of the current regime of external professional development and performance plans is unclear.

One of the key goals of the National Teacher Workforce Action Plan (NTWAP) relates to retention, specifically to “improve retention by increasing support for teachers, enhancing career pathways, reducing unnecessary workload and freeing up teachers to focus on core teaching tasks and collaboration.”⁵² Existing processes of accreditation and professional development are not best designed to achieve this important goal.

Ongoing accreditation requires professional development activities, and Australian teachers are significantly engaged in professional development activities: the Australian average is 5.15 different activities compared to the OECD average of 4.04 — putting Australia right near the top of OECD nations. However, it's quality rather than quantity which matters. Research shows effective PD must satisfy several criteria in order to generate improvements in teaching practice:

- It should provide insight into an aspect of teaching and learning;
- It should motivate teachers to adopt goal-directed changes in practice;
- It should provide techniques for putting this to work; and
- It must become an embedded or routinised part of practice.⁵³

Instead, in Victoria, external professional development is also left up to the school, with no requirements for that professional development to be accredited with the VIT or the Victorian Department of Education, or aligned with any evidence of efficacy. This is despite evidence showing some forms of knowledge and practice have a greater impact on student outcomes than others; therefore these — pedagogical and content knowledge, quality of instruction, classroom climate and management — should be the focus of professional development.⁵⁴ In theory, the ongoing requirement for Performance and Development Plans⁵⁵ (or Statement of Expectation⁵⁶) ought to act as a check on external professional development activities as they need to be aligned to goals which are informed by school priorities. However, so rarely does any staff member fail their PDP or equivalent process that it is unclear how the requirement is meaningfully contributing to developing staff capacity.

In addition to PDP or the equivalent being signed off in the eduPay system at the end of each school year, teachers with full, practising teacher registration must complete 20 hours of professional learning (in addition to 20 days of teaching) and declare this to the VIT; specifics are not required unless a teacher is transitioning from non-practising to practising.⁵⁷ This is required to be declared by 30 September of each year. Given the PDP process takes place at the end of the calendar year, government school teachers are having their professional development certified in two different

ways, to two different bodies, with very little intrinsic link to an increase in teacher efficacy, within three months.

The incoherent and bureaucratic nature of accreditation aligns with OECD survey data of Australian teachers showing that 43% feel appraisal and feedback have little impact on classroom teaching, around 62% say it is primarily an administrative exercise, and 71% feel feedback isn't based on a thorough assessment of performance.⁵⁸ While no such data is available for Victoria, NSW's Audit Office found only a fraction of teachers received the required twice-yearly classroom observations.⁵⁹ Given the importance of observation as a mechanism for appraisal of teacher quality, the government should commission a similar survey to inform policy decisions.

Recommendation 8: Review ongoing professional development opportunities and external accountability requirements (PDP, SOE, annual VIT registration) to align with the evidence on what forms of appraisal have a direct bearing on teacher quality.

Look to other jurisdictions to make professional development count

To maintain full, practising teacher registration in Victoria requires a declaration in the online VIT platform that you have met the practice requirements as well as the professional learning requirements. In NSW, from November 2023, the situation will be similar: teachers will be able to declare they have met their requirements and can provide records if selected for audit — previously, a declaration from the principal was required. However, the requirements of professional development are different: in NSW, the requirement is 100 hours of professional development, half of which must focus on priority areas⁶⁰ but in Victoria only 20 hours. There is no benefit in forcing teachers to do additional professional development and document this if the opportunities in question do not meaningfully align with what will help them become better teachers. However, the notion of requiring some PD to be on 'priority areas' or similar is a good one if those priority areas are meaningful — following suggestions made elsewhere in this submission.

Recommendation 9: Review Victoria's professional learning requirements in line with other recommendations made in this submission to maximise impact of 20 hours of professional learning.

Though England's Early Career Framework is explicitly for early career teachers, it is detailed enough to form the basis for teacher professional development at all levels.

Published in 2019, has five focus areas for early career development: behaviour management, pedagogy, curriculum, assessment and professional behaviours. These can be linked to eight Teachers' Standards,[‡] but the ECF is not intended to be used as an assessment tool, rather as "an entitlement to additional support and training." The content in this framework could therefore inform the focus of the government's recent commitment to a \$95.7 million Career Start Initiative for graduate teachers.⁶¹

The document goes through the eight Standards and combines normative statements such as "Teachers have the ability to affect and improve the wellbeing, motivation and behaviour of their pupils" with clear implications for what specific tasks early career teachers should be engaged in, for

[‡] The Teachers' Standards are somewhat similar to the APST: 1) Set high expectations, 2) Promote good progress, 3) Demonstrate good subject and curriculum knowledge, 4) Plan and teach well-structured lessons, 5) Adapt teaching, 6) Make accurate and productive use of assessment, 7) Manage behaviour effectively and 8) Fulfil wider professional responsibilities.

example “Creating a culture of respect and trust in the classroom that supporter all pupils to succeed (e.g. by modelling the types of courteous behaviour expected of pupils).” Where the APST is vague about what the final product is supposed to look like for teacher and students in the classroom, the ECF is specific about both the desired end state and the strategies early career teachers should be focusing on to attain that.

Below is a screenshot of the section of the framework that relates to how pupils learn:

Figure 13: How Pupils Learn (Standard 2 – Promote good progress)

How Pupils Learn (Standard 2 – Promote good progress)	
Learn that...	Learn how to...
<ol style="list-style-type: none"> 1. Learning involves a lasting change in pupils’ capabilities or understanding. 2. Prior knowledge plays an important role in how pupils learn; committing some key facts to their long-term memory is likely to help pupils learn more complex ideas. 3. An important factor in learning is memory, which can be thought of as comprising two elements: working memory and long-term memory. 4. Working memory is where information that is being actively processed is held, but its capacity is limited and can be overloaded. 5. Long-term memory can be considered as a store of knowledge that changes as pupils learn by integrating new ideas with existing knowledge. 6. Where prior knowledge is weak, pupils are more likely to develop misconceptions, particularly if new ideas are introduced too quickly. 7. Regular purposeful practice of what has previously been taught can help consolidate material and help pupils remember what they have learned. 8. Requiring pupils to retrieve information from memory, and spacing practice so that pupils revisit ideas after a gap are also likely to strengthen recall. 9. Worked examples that take pupils through each step of a new process are also likely to support pupils to learn. 	<p>Avoid overloading working memory, by:</p> <ul style="list-style-type: none"> • <i>Taking into account pupils’ prior knowledge when planning how much new information to introduce.</i> • <i>Breaking complex material into smaller steps (e.g. using partially completed examples to focus pupils on the specific steps).</i> • <i>Reducing distractions that take attention away from what is being taught (e.g. keeping the complexity of a task to a minimum, so that attention is focused on the content).</i> <p>Build on pupils’ prior knowledge, by:</p> <ul style="list-style-type: none"> • <i>Identifying possible misconceptions and planning how to prevent these forming.</i> • <i>Linking what pupils already know to what is being taught (e.g. explaining how new content builds on what is already known).</i> • <i>Sequencing lessons so that pupils secure foundational knowledge before encountering more complex content.</i> • <i>Encouraging pupils to share emerging understanding and points of confusion so that misconceptions can be addressed.</i> <p>Increase likelihood of material being retained, by:</p> <ul style="list-style-type: none"> • <i>Balancing exposition, repetition, practice and retrieval of critical knowledge and skills.</i> • <i>Planning regular review and practice of key ideas and concepts over time.</i> • <i>Designing practice, generation and retrieval tasks that provide just enough support so that pupils experience a high success rate when attempting challenging work.</i> • <i>Increasing challenge with practice and retrieval as knowledge becomes more secure (e.g. by removing scaffolding, lengthening spacing or introducing interacting elements).</i>

Specific advice and guidance for early career teachers about what success looks like as a teacher and for students is critical for developing early career teachers’ sense of self-efficacy and better outcomes for students.

Recommendation 10: Utilise England’s Early Career Framework – as well as its underlying research base – to review professional development frameworks and programs for graduate, early career and mid-career teachers, including the new Career Start Initiatives and the relatively new Victorian Academy for Teaching and Leadership.

The work of the Dallas Independent School District (Dallas ISD) in altering its structure of teacher evaluation and compensation systems is worth further consideration. Both principals and teachers were subject to Excellence Initiatives (PEI in 2013 and TEI in 2015, respectively) which replaced the traditional method of determining salary through a combination of years of experience (tenure) and level of qualifications (attainment) with one that utilised aggregated evaluation scores. The evaluation is based on an 18 indicator, four domain rubric, against which teachers are assessed based on classroom observations of instruction, teacher and/or student artefacts, student achievement in multiple domains, and student or family surveys.⁶² Professional development opportunities in this model are extensive, including exemplar videos for practise, one-on-one and peer instructional coaching, professional learning communities and summer holiday development.⁶³ Salary brackets are adjusted for cost of living, but advancement through the nine brackets depends on performance in the evaluation. The TEI Teacher Guidebook notes:⁶⁴

Our goals for strategic compensation are to:

- Support the recruitment and retention of highly effective teachers;
- Differentiate salaries to reward teachers who perform well and raise student achievement;
- Enable the organization to shift compensation from factors that have not helped to raise student achievement or the quality of instruction to those that do; and
- Reward professionalism and leadership.

A team of researchers led by Eric Hanushek of Stanford University’s Hoover Institution examined whether the outcomes-based accountability and compensation of the TEI model led to improvements in instruction and, consequently, student outcomes. When compared to a synthetic control group, Dallas ISD Mathematics and Reading average achievement increased, with the majority of the growth attributable to teacher-level effects such as the impact of stronger performance incentives, better school leadership and enhanced professional development.⁶⁵ The TEI model also enabled retention of the most effective teachers and attrition of the least: those who exited the district had substantially lower average evaluation scores than those who remained.⁶⁶ However, it is important to note that teachers were not dismissed for not meeting a certain evaluation standard; exit from the district was voluntary.

A clear and objective standard for teacher quality through TEI is not just a benefit to the teachers themselves and the students they serve. The TEI measure also enabled Dallas ISD to identify the most effective teachers and offer strong incentives to recruit them into hard-to-staff schools or schools that would benefit most from high-performing teachers – what is called the ‘Accelerating Campus Excellence’ (ACE) initiative.⁶⁷

An older teacher evaluation model was the Washington DC public school district (DCPS)’s IMPACT model, which uses similar evaluation methods to those later used in Dallas ISD but with an additional ‘stick’ measure – teachers rated “ineffective” are almost always dismissed, and those rated “minimally effective” have a year to raise their score and face dismissal if they do not. Many teachers in the “minimally effective” category also voluntarily left.⁶⁸ On the other hand, there are financial

rewards for those rated highly including bonuses and increases to base pay if high performance is sustained.⁶⁹ Like the TEI initiative, IMPACT supports professional growth by clarifying expectations and providing frequent and meaningful feedback across the measures of instructional practice, student achievement, instructional culture and collaboration.⁷⁰ Instructional practice is shaped and assessed by a clear document of five Essential Practices, containing a clear description of the practices and at various stages of development,⁷¹ as well as instructional coaching and other forms of professional support.

Research into the program's effectiveness has looked at different dimensions. Research suggests that IMPACT's combined 'carrot' and 'stick' approach led to an improvement overall in the quality of the workforce by increasing voluntary attrition of low performers and improving the performance of remaining teachers. The financial incentives also further improved the performance of teachers already evaluated as high-performing.⁷² Subsequent research found that the potentially negative impacts of higher teacher turnover from low-performing teacher attrition were more than offset, as judged by student achievement, by their replacement by higher-performing teachers.⁷³ A qualitative study of perceptions of IMPACT by DCPS teachers and leaders found views mixed, with some teachers and leaders expressing the view that it created distrust, fear and competitiveness in schools and the high-stakes nature of the program as a contributor to that (while noting it also creates positive incentives). Participants in the study also noted concerns such as a perceived lack of alignment between IMPACT and the professional growth opportunities, and fairness and objectivity concerns — particularly around the need for greater subject matter knowledgeable observers.⁷⁴

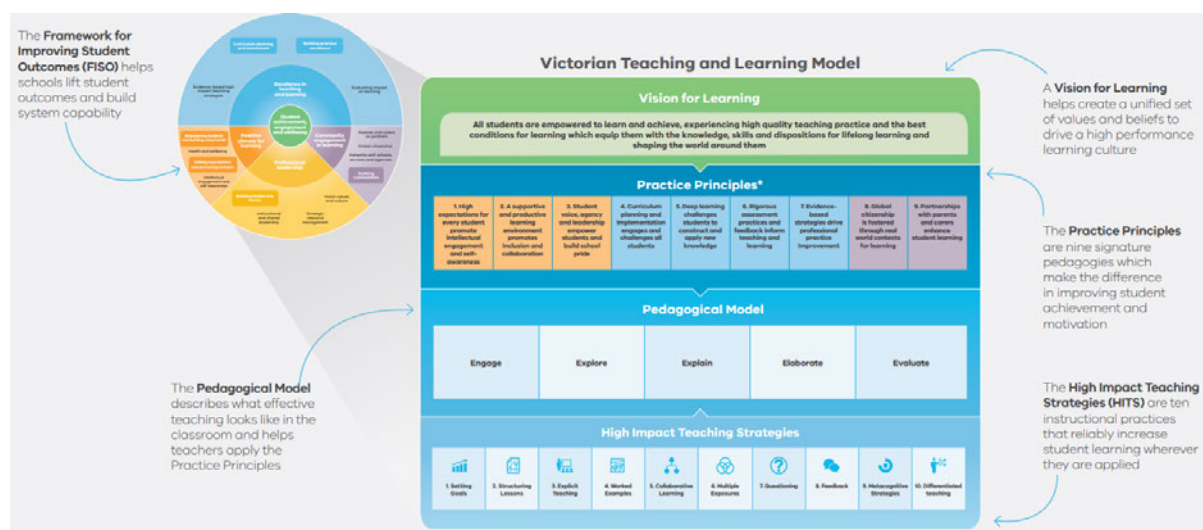
Recommendation 11: Examine the model of evaluation-based approaches to ongoing professional development and accreditation and examine its feasibility for Victoria.

Recommendation 12: Examine the models of performance-based pay and examine feasibility for Victoria.

6) Pedagogical guidance provided to schools is inconsistent in its alignment with best practice

The purpose of this section is to critically analyse the range of resources the Department of Education provides to support schools in their work and to identify areas for improvement of these resources.

Figure 6: The Victorian Teaching and Learning Model in relation to the Framework for Improving Student Outcomes



A diagram of the main resources (with the original Framework for Improving Student Outcomes and missing the High-Impact Wellbeing Strategies) is presented above and a summary of the main resources, with URLs, is presented in the table below.

Acronym	Title	Description of document
FISO	Framework for Improving Student Outcomes	<p>A stage-based improvement cycle primarily aimed at school leaders. It has two outcomes: learning and wellbeing (previously achievement, engagement and wellbeing). These outcomes are achieved through leadership, teaching and learning, assessment, engagement, and support and resources, each of which has two dimensions (10 total) that indicate priority areas of practice that drive towards the two outcomes</p> <p>It consists of four stages:</p> <ul style="list-style-type: none"> Evaluate and diagnose: gather and analyse data; Prioritise and set goals: examine current processes and practice; Develop and plan: identify and plan actions; and Implement and monitor: implement and monitor impact. <p>This framework is designed to be applied flexibly in a school context to school-specific plans such as the School Strategic Plan (SSP) and its accompanying Annual Implementation Plan (AIP).</p>
VTLM	Victorian Teaching and Learning Model	<p>The VTLM has four components: a Vision (for learning and wellbeing, the goals in FISO) which informs nine Practice Principles (PP) which informs a five-phase Pedagogical Model (PM). The High-Impact Teaching Strategies (HITS) and High-Impact Wellbeing Strategies (HIWS) inform the delivery of the PM.</p> <p>The Department guidance on the VTLM states that “schools may choose to implement, as a whole or in part” as part of their priorities as enunciated in the SSP and AIP.</p>
PP	Practice Principles	<p>The ‘Practice Principles for Excellence in Teaching and Learning’ are intended as a guide for reflection and conversations within schools and teaching teams. The document notes that they are based on research and states that they are “signature pedagogies which ‘make the difference’, and research has explicitly linked them to improved student achievement and motivation.”</p> <ol style="list-style-type: none"> High expectations for every student promote intellectual engagement and self-awareness. A supportive and productive learning environment promotes inclusion and collaboration. Student voice, agency and leadership empower students and build school pride. Curriculum planning and implementation engages and challenges all students.

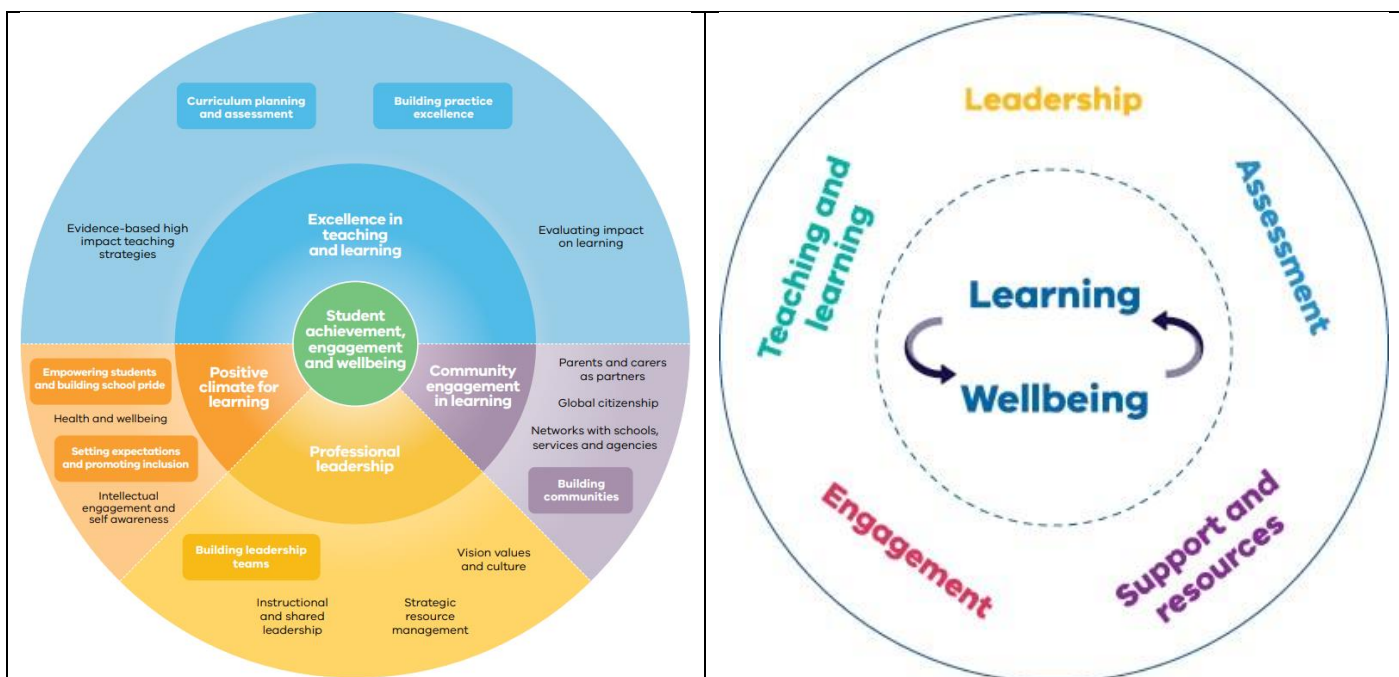
		<p>5. Deep learning challenges students to construct and apply new knowledge.</p> <p>6. Rigorous assessment practices and feedback inform teaching and learning.</p> <p>7. Evidence-based strategies drive professional practice improvement.</p> <p>8. Global citizenship is fostered through real world contexts for learning.</p> <p>9. Partnerships with parents and carers enhance student learning.</p> <p>Each Principle is supported with a short list of supporting literature and each has 3-4 actions with information about what the action looks like in practice.</p>
PM	Pedagogical Model	<p>The Pedagogical Model “defines what high quality teaching looks like” but the DOE notes as well that it is “not a prescription for practice”. It consists of five domains:</p> <ul style="list-style-type: none"> • Engage – Teachers know their students well, engage them, motivate and empower students; • Explore – Teachers present challenging tasks, they help students expand their perspectives; • Explain – Teachers explicitly teach relevant knowledge, they monitor student progress in learning and provide structured opportunities; • Elaborate – Teachers challenge students to move to deep learning, they support students to be reflective; and • Evaluate – Teachers use multiple forms of assessment and feedback, they monitor student progress and analyse data. <p>Each domain links to at least three of the ‘actions’ contained in the elaborations for the Practice Principles</p>
HITS	High-Impact Teaching Strategies	<p>The HITS are a set of 10 instructional practices, that “reliable increase student learning wherever they are applied”. The HITS are derived from the practices which rank the most highly in John Hattie’s work using meta-analysis to generate effect sizes (measure of contribution to learning).</p> <p>The HITS are list below, with a brief summary derived from the wording used in the document.</p> <ol style="list-style-type: none"> 1. Setting goals: lessons have clear learning intentions. 2. Structuring lessons: a lesson structure maps teaching and learning that occurs in class. 3. Explicit teaching: clearly showing students what to do and how to do it. 4. Worked examples: demonstration of the steps required to complete a task or solve a problem. 5. Collaborative learning: students work in small groups and everyone participates in a learning task. 6. Multiple exposures: multiple opportunities to encounter, engage with, and elaborate on new knowledge and skills. 7. Questioning: effective questioning yields immediate feedback on student understanding. 8. Feedback: informs a student and/or teacher about the student’s progress relative to learning goals. 9. Metacognitive strategies: students are taught to think about their own thinking/the learning process. 10. Differentiated teaching: methods teachers use to extend the knowledge and skills of every student in every class, regardless of their starting point. <p>Each of these is elaborated in the HITS guide with the effect size found by Hattie in his 2009 work Visible Learning, examples and illustrations of practice, a ‘continuum’ of practice that ranges from Emerging to Excelling, and a list of references.</p>
HIWS	High-Impact Wellbeing Strategies	<p>The High-Impact Wellbeing Strategies document defines wellbeing, in alignment with FISO, as “s the capabilities necessary to thrive, contribute and respond positively to the challenges and opportunities of life”. It details practical, evidence-based strategies that positively impact student wellbeing and was developed in collaboration with Monash University.</p> <p>They are:</p> <ol style="list-style-type: none"> 1. Build relationships with students. 2. Facilitate peer relationships.

		<ol style="list-style-type: none"> 3. Establish and maintain clear classroom expectations. 4. Support inclusion and belonging. 5. Foster student self-efficacy. 6. Engage students. 7. Promote coping strategies and facilitate referrals.
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The diagram and table demonstrate that the guidance the Victorian Department of Education gives to schools regarding school improvement and teaching and learning is extensive, detailed and seemingly coherent. However, a closer examination reveals several areas for improvement.

FISO's change in focus between the first iteration and FISO 2.0 is concerning. FISO 2.0 is distinct in two respects: firstly, the previous outcomes of 'achievement, engagement and wellbeing' was replaced by two outcomes of 'learning and wellbeing' as a direct response to the findings of the Royal Commission into Victoria's Mental Health system to emphasise wellbeing; secondly, the model was simplified and streamlined.⁷⁵ The two versions are reproduced below.

Figure 7: The original FISO (left) and FISO 2.0 (right)



While the term 'learning' includes academic achievement, the term is much more nebulous; anything students do in school can be considered learning if they are doing something they haven't done before. The shift away from achievement — which implies the existence of some kind of objective benchmark and a belief that schools should be intended to help students reach them — and towards 'learning' is concerning because it suggests that achievement is less important than before. The presentation of the original FISO, which positions 'Excellence in teaching and learning' as half of the diagram and suggests that represents half of where a school's effort should be placed. FISO 2.0, while simplified, lacks any clarity as to how schools should prioritise their improvement efforts, i.e., which 'student outcomes' are most relevant.

Moreover, the increased focus on wellbeing suggests it is equally as important for schools to produce 'well' students as to produce students who have the requisite knowledge in curriculum areas to be

functional adults. The core business of schools and teachers — performed by no other institution in society and for which teachers are trained — is to educate according to the curriculum. The diagram presents ‘learning’ and ‘wellbeing’ as mutually reinforcing, but the simplified design of the framework does not support this. If wellbeing is also conceived as a prerequisite for achievement of academic outcomes, rather than a byproduct of achievement of academic outcomes, it has the potential to misdirect the efforts of schools. One study of a correlational analysis between Year 5 NAPLAN data and different domains of the Victorian Department of Education’s Attitudes to School Survey (AtoSS) suggests there is no statistically significant correlation between measures such as learning confidence, student voice and agency, sense of connectedness and sense of inclusion and student achievement across any of the five NAPLAN domains.⁷⁶ This suggests measures to improve these indicators in the expectation it will flow through to academic outcomes may be misguided.

Recommendation 13: Revise FISO to re-emphasise student academic achievement and position wellbeing as a product of achievement rather than its precondition.

The Victorian Teaching and Learning Model is explicitly framed as optional. Though it is better to maintain the voluntary nature of a model which, in practice, requires improvement, it is concerning that these documents claim to be based on research and evidence as to what constitutes best practice and yet are presented as optional. This in turn suggests it is optional for schools to base their teaching and learning activities on best practice.

The Practice Principles, when combined with the other elements of the VTLM, are complex and confusing. Nine principles each have between three and four related Actions intended to guide teacher practice. Where some of the Actions are specific and clear — such as 4.2 and 4.3, which relate to implementing scope and sequence and updating learning programs respectively — others are less clear and not as well supported by evidence; such as 1.2, 3.2 and 3.3, which all refer to teachers ‘co-designing’ with students. Some principles — for example #5, which speaks of “deep learning” as that which goes beyond “surface learning” — rely on concepts that are not clearly defined and substantiated in literature. Others — such as #8: “Global citizenship is fostered through real world contexts for learning” — are not substantiated by a wealth of evidence.

Furthermore, when the elements of the PP are considered in light of the simplified FISO 2.0, there is no clear sense of which actions are supported by the strongest evidence and which have the largest demonstrated impact on student outcomes. As well as being long, complex and overlapping with other documents (such as the Australian Professional Standards for Teachers), the PP lacks the practical utility of clear guidance on how to prioritise changes.

Recommendation 14: Remove the Practice Principles from the VTLM.

The High-Impact Teaching Strategies are largely evidence-based but require more clarity for successful and consistent implementation. Like other documents within the VTLM, the HITS guide contains a list of references to support each. However, there are three main problems with the HITS: firstly, that it does not show how the strategies must overlap in order to have maximum effect, secondly, it does not propose a practical model for the lesson-level or unit-level implementation, and, thirdly, that some of the strategies are too vague or based on evidence of insufficient quality.

Explicit teaching is defined as “the teacher decid[ing] on the learning intentions and success criteria, mak[ing] them transparent to students, and demonstrate[ing] them through modelling. The teacher checks for understanding, and at the end of each lesson revisits what was covered and ties it all

together.” The explicit teaching entry contains a list of related effect sizes, including goals (covered in HIT #1), modelling (worked examples, #4), and checking for understanding aligns with questioning (#7) and feedback (#8). Implied in the description of explicit teaching is a clear lesson structure (#2). Explicit teaching therefore should be positioned as an overarching pedagogy which contains multiple high-impact strategies which, applied together, drive superior learning outcomes. Nevertheless, the menu approach of the HITS suggests that explicit teaching is no more effective than the other strategies and that pairing, say, ‘setting goals’ with inquiry learning — a dominant pedagogy particularly evident in the Pedagogical Model as well as several practice illustrations — will be just as effective as pairing it with explicit teaching. However, according to the live website of Visible Learning, “inquiry-based teaching” has an effect size of just 0.31.

The HITS was first published in 2017 and was revised in 2020. The core content of the HITS did not change, but a few changes were made within the text: for instance, Reading Recovery was listed as a related effect size (of 0.5) to #10, ‘differentiated teaching’ in the 2017 version but replaced with ‘second and third chance programs’ in 2020. The live Visible Learning website has effect sizes for multiple techniques grouped under the heading ‘collaborative learning’, but collaborative learning appears as a standalone entry on the list, but with an effect size of only 0.29⁷⁷ — much lower than other effect sizes used. Piagetian Programs are also listed as having an effect size of 1.28 based on one meta-analysis from 1981. Contemporary cognitive scientists such as Daniel Willingham, in contrast, shows that children’s development does not occur in discrete stages consistent across domains and types of tasks, contrary to the theories of Jean Piaget.⁷⁸ Teachers can therefore look at the HITS and develop a mistaken view about what is most effective.

In fact, researchers have observed that Visible Learning is derived from meta-analysis of meta-analysis: the meta-analysis incorporated could number one or several, it could be based on a small number of substantive studies or a large number and the studies could be based on high-quality experimental and quasi-experimental methods or low-quality observational methods. While it is appropriate that instructional decisions are made on the basis of evidence, using effect sizes to create a simple list of ‘top 10’ strategies is misguided.⁷⁹

Instead, a better substantiated method of deriving high-impact strategies is to examine developments in cognitive science relating to how the brain learns, and the effectiveness of teaching strategies aligned with that science. This is sometimes called the ‘science of learning’ and is a key area of research for the Australian Education Research Organisation. AERO research focuses on four key insights against which effective teaching practice can be determined:⁸⁰

1. Learning is a change in long-term memory;
2. Students process limited amounts of new information;
3. Students develop and demonstrate mastery; and
4. Students are actively engaged when learning.

A key work that connects research in cognitive science and cognitive supporters to assist learning with research on the classroom practices of master teachers is the 2012 article by University of Illinois professor Barak Rosenshine, “Principles of Instruction: Research-Based Strategies That All Teachers Should Know”, which nominates ten main principles:⁸¹

1. Begin a lesson with a short review of previous learning;
2. Present new material in small steps with student practice after each step;
3. Ask a large number of questions and check the responses of all students;
4. Provide models;

5. Guide student practice;
6. Check for student understanding;
7. Obtain a high success rate;
8. Provide scaffolds for difficult tasks;
9. Require and monitor independent practice;and
10. Engage students in weekly and monthly review.

There are many similarities between the above principles and the HITS: models, examples and questioning are some of the common elements. However, Rosenshine’s Principles have clear foundations in and links to how the brain learns – in other words, *why* these strategies work, not simply what the strategies are and how they might work in practice as the HITS do. Consequently, the evidence base is much stronger.

Recommendation 15: Revise the content of the HITS, perhaps replacing the list with Rosenshine’s principles, and present the revised strategies in line with a new Pedagogical Model.

Recommendation 16: Provide more explicit materials such as unit plans and scope and sequences which show how HITS can be implemented over a series of lessons, not simply in one.

The Pedagogical Model contradicts the High-Impact Teaching Strategies. The PM’s five ‘E’ words are based on the 5E or e⁵ model of pedagogy, originally developed by Rodger Bybee for use in biological science. It is based on constructivist principles and is a method to support inquiry-based teaching and learning. This instructional model was reiterated in 2018, but was first mobilised in 2009 by what was then the Department of Education and Early Childhood Development in 2009,⁸² though primary evidence of this is now difficult to find.⁸³ Evidence from cognitive science is clear that inquiry-based or constructivist learning is not the most effective way for novices to learn new content.⁸⁴

An alternative model for teaching that aligns with scientific evidence of how students learn was published by AERO in September 2023:

1. Enabling: foster the conditions of a learning-focused environment e.g. rules and routines, respectful interactions, self-regulated learning, cultural safety, family engagement;
2. Planning: develop a teaching and learning plan for the knowledge students will acquire e.g. define knowledge, chunk content, sequence instruction, plan to assess;
3. Instruction: manage the cognitive load of learning tasks e.g. explain learning objectives, teach explicitly, scaffold practice, monitor progress, support tiered interventions; and
4. Gradual release: maximise retention, consolidation and application of learning e.g. revisit and review, vary practice, organise knowledge, extend and challenge.

Part 1 of this model links to whole school culture and procedures, part 2 is work that is done at the scope and sequence level, and parts 3 and 4 relate to the unit plan and individual lesson level.

Recommendation 17: Replace the Pedagogical Model with more explicit guidance on how to structure lessons, units and sequences, potentially based on the current work of the Australian Education Research Organisation, which more closely reflect the latest developments in learning science.

Revision of FISO and the VTLM in this manner would bring the Victorian Department of Education’s pedagogical guidance in line with the *Strong Beginnings* report from the Teacher Education Expert Panel. The panel recommended mandating core content in initial teacher education degrees in four

areas, including “The brain and learning: content that provides teachers with an understanding of why specific instructional practices work, and how to implement these practices” and “Effective pedagogical practices: practices including explicit modelling, scaffolding, formative assessment, and literacy and numeracy teaching strategies that support student learning because they respond to how the brain processes, stores and retrieves information.”⁸⁵

System-wide pedagogical guidance in other jurisdictions

While the science of reading emphasises the importance of explicit and systematic instruction for teaching early reading skills, there is compelling evidence — some dating back to the 1960s — that explicit instruction approaches more broadly can aid learning. This is further explored in Section 6. However, we can also look to other systems for how this is being embedded as part of system-wide pedagogical change or in forming the basis of pedagogical guidance from the Department of Education.

*Example 1: Catalyst and the Catholic Education Archdiocese of Canberra and Goulburn*⁸⁶

The Catalyst team examined research and evidence from educational experts such as ED Hirsch Jr, Barak Rosenshine, Dylan Wiliam and John Sweller to develop 8 ‘big ideas’ for learning:

1. School is where we learn biologically secondary information;
2. Learning is a change in long-term memory;
3. Teaching is a profession that should be informed by the evidence;
4. Knowledge matters — it’s what we think with;
5. The most efficient way to teach knowledge is to teach explicitly;
6. High quality whole class instruction will help all students learn;
7. Reading is essential for students to acquire knowledge; and
8. Curriculum should be ambitious, coherent, sequential and cumulative.

These ideas inform curriculum (what to teach), pedagogy (how to teach) and assessment (how we know). They also focus on five High Impact Teaching Practices: explicit instruction, practise and retrieval, engagement and participation, explaining and modelling and checking for understanding.

To equip over 1,700 teaching staff in 56 schools, they provide:

- Curriculum and syllabus-aligned scope and sequence documents;
- Curriculum maps with topics, sequence and guidance for each lesson;
- Lesson resources for every lesson; and
- Assessment samples.

Staff professional development follows a theory into practice into embedding and growth cycle as supported by literature, progressing as follows: 1) theory, 2) demonstration, 3) practise and 4) coaching.

Though implementing such a model across over 1,500 government schools⁸⁷ would be challenging, smaller-scale models could be trialled first and gradually expanded.

Example 2: What Works Best, NSW Department of Education

In 2014, the NSW Government’s CESE put out a report on “What Works Best: Evidence-based practices to help improve NSW student performance”, later updated in 2020. It contextualises its eight themes as “... some of the best evidenced practices in education, and attention to these

strategies is almost always evident in our high-performing schools.”⁸⁸ One of its themes is explicit teaching.

Unlike similar documents from the Victorian Department of Education, the WWB document is much clearer in its evidence base and contextualises it with other CESE research on student performance, rather than relying solely on a problematic ‘effect size’ model. In particular, CESE uses its student survey — Tell Them From Me — to track use of explicit teaching practices and measure against NAPLAN Numeracy scale scores. Compared to the ‘explicit instruction’ entry in Victoria’s HITS, document, the WWB document is more specific as to what specific elements of explicit teaching are supported by what elements, and provides more detailed implications for classroom practice as seen in Figure 14:

Figure 14: Extract from the What Works Best guide on explicit instruction

Implications for schools and teachers

The evidence strongly supports teachers’ use of explicit teaching practices, including:

- telling students what they will be learning, and being clear about the purpose of tasks
- demonstrating or explaining new ideas, and checking that students understand
- giving time for asking and answering questions
- giving specific feedback based on success criteria
- systematically delivering skills, concepts and content knowledge in the right sequence to provide the building blocks towards mastery
- asking students challenging questions, such as ‘why, why-not, how, what-if, how does X compare to Y, and what is the evidence for X?’
- assessing and confirming whether students understand what they are learning before progressing
- reviewing learning and explaining how it contributes to related and more complex skills
- providing opportunities for guided, and then independent, practice as students gain proficiency and understanding of concepts and skills.

Consistent use of explicit teaching practices across the whole school supports teachers’ use of effective practices. A whole-school approach creates a common language around practice which in turn supports teacher collaboration and strengthens classroom observation practice.

Recommendation 18: In line with Recommendations 13-17, revise pedagogical guidance to clearly align with evidence-based explicit teaching practices.

CESE can also monitor student experience of these practices through specific questions in the Tell Them From Me survey and the analysis of this data can be used to drive system-wide improvement. In contrast, the Victorian equivalent — Attitudes to School Survey (AtoSS) — which includes some useful questions about teaching practices⁸⁹ in the student-facing version is not published or analysed for publication in a report, even at a high level.

Recommendation 19: In line with Recommendation 29, analyse Attitudes to School survey data and publish this as a report to help track use of effective teaching practices.

7) More support could be provided from the system to promote effective practices

A common thread evident in the curriculum and pedagogical guidance provided by the Department of Education is Victoria's tradition of school autonomy, which dates back to the 1970s. Curriculum (what is taught) moved from being "centralised and prescribed" to "school-based curriculum development", and this has been the case since — despite changes such as the creation of the Australian Curriculum. Victoria has used the flexibility in the implementation of the Victorian Curriculum to create a separate and distinct curriculum (for example, eliminating the stand-alone cross-curriculum priorities) and maintain the expectation that specific teaching and learning programs remain a school-based responsibility.⁹⁰ The Victorian Curriculum and Assessment Authority (VCAA) has noted the school-based model "has not always been accompanied by a sufficient level of advice and support to schools to enable the development of system-wide high-quality teaching and learning programs."⁹¹

Despite this observation being made in the VCAA's Victorian Curriculum F-10 Planning and Reporting Guidelines, a brief survey of the assistance provided to schools in terms of translating the curriculum to meaningful teaching and learning programs suggests that the VCAA has not taken its own observation seriously and, in some cases, actively encourages schools to pursue ineffective, inquiry-based approaches to learning.⁹² This section will explore a handful of key areas in which greater assistance and guidance from the centre is required in order to assist schools to implement high-quality teaching and learning programs.

Area 1: Revise and clarify advice on early literacy instruction

The VCAA F-10 Curriculum document tells schools they do not have to structure their teaching and learning programs and timetables based on subjects, and suggests schools structure teaching and learning programs for Foundation (Prep to Year 2) around the five outcomes of the Victorian Early Years Learning and Development Framework[§] — none of which relate to the development of foundational academic skills in literacy and numeracy. Two pages later, this same document tells schools of the "importance of explicit instruction" in the acquisition of literacy skills. The advice from the Department of Education again offers schools a range of approaches: a "workshop" approach, a "language experience" approach or a "teaching and learning cycle" approach.⁹³ None of these options put explicit and systematic instruction in the five keys to reading (phonemic awareness, phonics, fluency, vocabulary and comprehension) at the centre of the approach to teaching literacy. The five keys to reading are evident in this guidance (Figure 8) but they are put in the middle and positioned as no more important than any of the other elements that schools could incorporate into their literacy work.

[§] The outcomes are 1) *Children have a strong sense of identity* 2) *Children are connected with and contribute to their world* 3) *Children have a strong sense of wellbeing* 4) *Children are confident and involved learners* and 5) *Children are effective communicators*

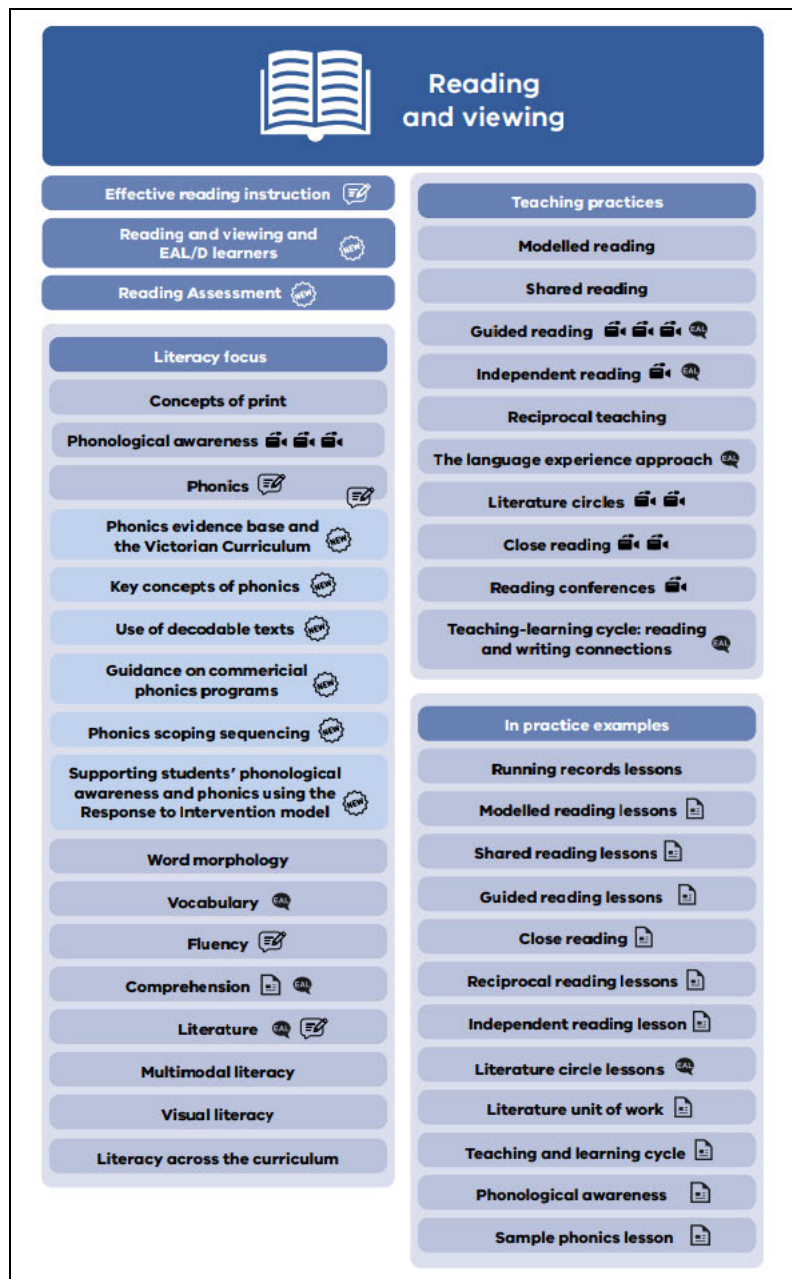
Figure 8: A screenshot of advice for designing Foundation to Year 2 literacy lessons (Department of Education, updated 14 April 2022, accessed 27 September 2023)⁹⁴

Each lesson structure is organised differently, although common elements are essential for early literacy learning. These elements, across the three lesson structures, include the importance of:

- [speaking and listening](#) as foundational to all learning, including students who bring [plurilingualism](#) to their learning in the form of languages or dialects additional to standard English
- [extended](#) and [accountable](#) talk, facilitated through a [dialogic classroom](#)
- understanding language at word, sentence and text level
- moving students along the mode continuum from the most spoken-like language to the most written-like language
- a comprehensive approach to [teaching reading](#)
- [phonological awareness](#) and [phonics](#) for [decoding](#) and [encoding](#)
- [handwriting](#) for phoneme/grapheme knowledge
- [vocabulary](#), [fluency](#) and [comprehension](#) for reading for understanding
- [spelling](#) knowledge such as phonology, morphology, orthography and etymology (where appropriate)
- [writing](#) for a range of purposes in a range of text types
- using [reciprocity](#), to build connections between the modes
- integrating [literacy learning across the curriculum](#)
- developing a deep engagement with texts, both as a reader and writer, including literary and multimodal contexts.

Specific guidance on phonics has been added to the Literacy Teaching Toolkit (a repertoire of resources and guidance from the Department of Education), but in practice, phonics and the other keys to reading are positioned as options on a crowded menu.

Figure 9: The reading and viewing section of the Literacy Teaching Toolkit for Foundation to Level 6 (Department of Education, published February 2023, accessed 27 September 2023)⁹⁵



There are other problems with the advice provided. Firstly, phonics is positioned within the Four Resources Model⁹⁶ from Peter Freebody and Allan Luke (1990),⁹⁷ which is not supported by evidence. Experts on the science and teaching of early reading said the following:

The Four Resources Model rests on a conceptualisation of reading as a component of critical literacy, being a ‘mode of second guessing texts, discourses and social formations’. The architects of the model argue that teaching reading relies on teachers selecting practices based on how they view students’ existing economic, social, cultural and linguistic assets for which the model maps a range of practices to use in response. *We have not been able to locate any robust empirical research that affirms the Four Resources Model as a theory of reading, or as a framework for teaching reading.*⁹⁸ (emphasis added)

Follow other states' lead in funding specific initiatives to promote the science of reading and the Year 1 Phonics Screening Check

The best evidence is clear about what is required to teach students to read, but advice from the Department of Education about how this critical skill is taught is imprecise at best and misleading at worst. Though Victoria lacks the glaring deficiencies in early reading as assessed by national and international testing, this year's NAPLAN results (Figure 6) show complacency is unwise. Instead, Victoria should learn from other states which are successfully incorporating a structured approach to early literacy based on the five keys to reading – phonemic awareness, phonics, vocabulary, fluency and comprehension

South Australia was the first mover, introducing a pilot phase of a Year 1 Phonics Screening Check — modelled on that used in England — under then-Labor Education Minister Susan Close in 2017⁹⁹ and then rolling it out state-wide under then-Liberal Education Minister John Gardner.¹⁰⁰ The Check occurs in Term 3 of Year 1 and is used to inform teaching. The teaching of systematic synthetic phonics was enabled by a significant investment in training of teachers by literacy coaches and ongoing professional learning and feedback to train additional teachers through the Department of Education's Literacy Guarantee Unit.¹⁰¹ In the first year of full operation, 2018, 43% of Year 1 students met the expected achievement level;¹⁰² increasing to 68% by 2022.¹⁰³

Since then, New South Wales followed suit in a 2020 trial which found — similar to South Australia — that just 43% of students met or exceeded the expected phonics achievement benchmark.¹⁰⁴ In 2022, this increased to 55%, despite the Year 1 students of that year experiencing severe disruptions to their schooling during the pandemic.¹⁰⁵

The Tasmanian Liberal Government commissioned a report into literacy, published in May 2023, which recommended (emphasis added):¹⁰⁶

- A) That the Government adopt the following minimum guarantee for literacy and monitor systems to ensure the approach is being followed:..
- B) When teaching reading in Tier 1 educators will, at a minimum, use practices aligned to the science of reading evidence base and align instruction to the Australian Curriculum by including the Big Six: *Oral Language, Vocabulary, Phonological Awareness, Letter sound knowledge (phonics), Comprehension, and Fluency*, in accordance with the systemic and whole school requirements. This includes for those students in secondary and senior secondary schools who are still developing foundational literacy skills and/or require more time on the content/strategies to acquire the necessary skill.
- C) All schools will be required to *implement the National Year 1 Phonics Check during Year 1, in Term 3, with the results from the Check being utilised to target future school-based intervention*. This implementation will include provision of evidence-based professional development in systematic phonics instruction, administering the Check, data collection and analysis of the Check and developing an intervention plan for students not meeting expected progress.

In response, the government committed to introduce the teaching of phonics from Prep to Year 2 in all primary schools by 2026 as well as conducting a Term 3 of Year 1 phonics check.¹⁰⁷ As of 2021, Tasmanian Labor's commitment to a phonics-based approach matched that of the Liberals, with Shadow Minister for Education Josh Willie saying, "We're on a unity ticket with the Liberal Party in terms of being ambitious for our children in terms of literacy outcomes."¹⁰⁸ The West Australian

Department of Education has also committed to a 'Phonics Initiative' which focuses on phonics, as well as oral language, phonological awareness, fluency, vocabulary and comprehension.¹⁰⁹

Recommendation 20: Adopt the science of reading as the foundation of early reading instruction and follow the South Australian Government's Literacy Guarantee model to shift practice of Victorian teachers.

In addition, the Victorian government's commitment to a mandatory Year 1 Phonics check is ineffective in its current form, as it utilises the English Online Interview¹¹⁰ and consists of only 10 words (5 real and 5 nonsense words) instead of the 40 used in New South Wales, South Australia, Tasmania and the version of the Check available in the Federal Government's Literacy Hub resources. Experts have noted that 10 words are not an adequate sample of a student's knowledge and therefore the Victorian check does not enable informed decision-making about which students require additional support.¹¹¹

Recommendation 21: Incorporate the already available and free Literacy Hub Phonics Screening Check into the mandatory assessment schedule.

Area 2: Provide in-depth curriculum guidance and lesson plans

As noted, school-based curriculum planning can result in the quality of teaching and learning programs being inconsistent and uneven; across classrooms, schools and regions. A key element of equity is that students should receive an excellent education regardless of where they live, and schools should be adequately supported by the Department to deliver this.

Early literacy is an area with a vast range of resources and advice, but little in the way of specific guidance on how it should translate to the classroom — even when evidence is clear. In other subject areas, there are high-level templates for things such as scopes and sequences and lesson plans but few resources to enable effective delivery.

One sample resource provided by the VCAA is for secondary school Mathematics.¹¹² As can be observed in Figure 10, it is divided into 18 weeks per semester, it contains the three mathematical strands, allocates a certain number of weeks per sub-strand, and contains a sequence for Years 7-10.

Figure 10: Sample Mathematics curriculum plan for Years 7-10 (Victorian Curriculum and Assessment Authority, publishing date unclear, accessed 27th September 2023)

Mathematics curriculum area plan – Years 7 to 10 (sample only)																			
Week		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Year 7	Semester 1	Surveys and displaying data 7.1.1		Whole numbers, factors and multiples 7.1.2			Angles, lines and shapes - 7.1.3			Length and area - 7.1.4			Number puzzles and patterns - 7.1.5		Integers, fractions and number lines - 7.1.6		Probability and proportion - 7.1.7		
		Sub-strand: Data representation and interpretation		Sub-strand: Number and place value			Sub-strand: Geometric reasoning			Sub-strand: Using units of measurement			Sub-strand: Patterns and algebra		Sub-strands: Real numbers; Number and place value		Sub-strand: Chance		
Year 7	Semester 2	Fractions - 7.2.1		Patterns, rules and equations - 7.2.2		Statistical data - 7.2.3		Decimals, percentages and simple ratios 7.2.4			Coordinates, graphs and transformations 7.2.5		Time and money - 7.2.6		Solids, volume, capacity and mass - 7.2.7				
		Sub-strand: Real numbers		Sub-strand: Patterns and algebra		Sub-strand: Data representation and interpretation		Sub-strand: Real numbers			Sub-strand: Patterns and algebra		Sub-strand: Using units of measurement		Sub-strand: Money and financial mathematics		Sub-strand: Using units of measurement, Shape		
Year 8	Semester 1	Positive and negative integers - 8.1.1		Maps, networks and coordinates - 8.1.2		Properties of plane shapes - 8.1.3			Measurement: time and shapes - 8.1.4			Collecting and displaying data - 8.1.5		Money and Percentages 8.1.6		Algebra Expressions - 8.1.7			
		Sub-strand: Number and place value		Sub-strand: Linear and non-linear relationships		Sub-strand: Geometric			Sub-strand: Using units of measurement			Sub-strand: Data representation and interpretation		Sub-strand: Money and financial mathematics, Real numbers		Sub-strand: Patterns and algebra			
Year 8	Semester 2	Linear functions and graphs - 8.2.1		Real numbers and indices - 8.2.2			Angles, polygons and solids - 8.2.3		Linear equations - 8.2.4		Volume and surface area - 8.2.5		Probability and simulation - 8.2.6		Ratios and rates - 8.2.7				
		Sub-strand: Patterns and algebra; Linear and non-linear relationships		Sub-strand: Real numbers			Sub-strand: Geometric reasoning		Sub-strand: Patterns and algebra		Sub-strand: Using units of measurement		Sub-strand: Chance		Sub-strand: Real numbers				
Year 9	Semester 1	Number and financial mathematics - 9.1.1		Pythagoras' theorem - 9.1.2			Algebra techniques - 9.1.3		Linear relations and coordinate geometry - 9.1.4			Rate, ratio and proportion - 9.1.5		Probability - 9.1.6		Similarity and trigonometric ratios - 9.1.7			
		Sub-strand: Real numbers; Money and financial mathematics		Sub-strand: Pythagoras and trigonometry			Sub-strand: Patterns and algebra		Sub-strand: Patterns and algebra			Sub-strand: Patterns and algebra		Sub-strand: Chance		Sub-strand: Geometric reasoning, Pythagoras and trigonometry			
Year 9	Semester 2	Applications of trigonometry - 9.2.1		Linear equations - 9.2.2		Indices and scientific notation - 9.2.3			Shapes, prisms and cylinders - 9.2.4			Statistics - 9.2.5		Further algebra - 9.2.6		Non-linear relations - 9.2.7			
		Sub-strand: Pythagoras and trigonometry		Sub-strand: Linear and non-linear relationships		Sub-strand: Real numbers; Patterns and algebra			Sub-strand: Using units of measurement			Sub-strand: Data representation and interpretation		Sub-strand: Patterns and algebra		Sub-strand: Patterns and algebra			
Year 10	Semester 1	Measurement - 10.1.1		Linear relationships - 10.1.2			Statistics Univariate - 10.1.3			Number and financial applications - 10.1.4			Coordinates geometry and simultaneous equations 10.1.6		Algebra techniques - 10.1.6				
		Sub-strand: Using units of measurement		Sub-strand: Linear and non-linear relationships			Sub-strand: Data representation and interpretation			Sub-strand: Real numbers; Money and financial mathematics; Patterns and algebra			Sub-strand: Patterns and algebra		Sub-strand: Patterns and algebra				
Year 10	Semester 2	Quadratic functions - 10.2.1		Trigonometry - 10.2.2			Geometry - 10.2.3			Probability - 10.2.4			Statistics Bivariate - 10.2.5		Relations and their graphs - 10.2.6				
		Sub-strand: Linear and non-linear relationships		Sub-strand: Pythagoras and trigonometry			Sub-strand: Geometric reasoning			Sub-strand: Chance			Sub-strand: Data representation and interpretation		Sub-strand: Linear and non-linear relationships				
Week		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

* Based on 3 hours teaching time per week

Key	Number and Algebra Strand	Statistics and Probability Strand	Measurement and Geometry Strand	Topic, level, semester and sequence
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However, this is not particularly helpful. There is no indication here about how — or whether — skills build sequentially and hierarchically, or why decisions have been made to allocate time to particular strands. The necessity of regular review is not included, nor is it advised. Here the strands are combined (e.g. statistics and probability) but on the VCAA Victorian Curriculum website, the content descriptors are separated into statistics (three descriptors) and probability (three descriptors).¹¹³ On a separate website, the strands each have what is termed a ‘scope and sequence’ across the four year levels, but this does not provide any additional information besides the text of the content descriptors.¹¹⁴

In practice, many hours of work go into creating a coherent scope and sequence, followed by unit plans that outline the sequence of teaching over multiple lessons as well as assessment criteria and finally the lesson-by-lesson plan — including details such as:

- The most effective way to do modelling;
- The best questions to ask to gauge student success;
- Appropriate worked examples and partially-worked examples; and
- How to present the new material in appropriate small steps to maximise student success.

Though Victorian schools are encouraged to utilise shared or group planning of lessons, quality is dependent on those teachers’ expertise, leading to high levels of variation.

The Grattan Institute terms this “the lesson lottery” and notes its role in increasing teacher workload:¹¹⁵

... without a coordinated, whole-school approach to planning — which carefully sequences learning of key knowledge and skills across subjects and year levels — even the hardest-

working teachers will struggle to give their students the best education. Many Australian teachers are being left to fend for themselves, creating lessons from scratch and scouring the internet and social media for teaching materials. This has contributed to unsustainable workloads and a high degree of variation in teaching and learning from one classroom to the next. It creates a lesson lottery for teachers and students.

The Grattan Institute also profiled five schools, two in Victoria (Docklands Primary School in inner-city Melbourne and Ballarat Clarendon College in the regional centre of Ballarat), to examine how they implement a whole-school approach to planning which creates consistency and quality for all students. By putting as much possible of planning for learning outside the workload of the individual classroom teacher, teachers can spend more time focusing on how to teach their class: the procedure for particular content, what questions to ask, and how they can adapt.

Other organisations exist that try to assist schools with as much of this work as possible. Ochre is a non-profit organisation that partners with expert teachers to generate a high-quality curriculum and make this available to all teachers free of charge.¹¹⁶ Ochre has recently partnered with AERO to share its materials; such as curriculum maps, scopes and sequences, unit plans, lesson plans and associated resources such as worksheets and quizzes.¹¹⁷ Through a more recently announced partnership with the National Catholic Education Commission, Ochre is moving its work into secondary Mathematics in 2024.¹¹⁸ Other areas covered to date include secondary Science, with materials also available for English and Mathematics from Foundation to Year 6.¹¹⁹

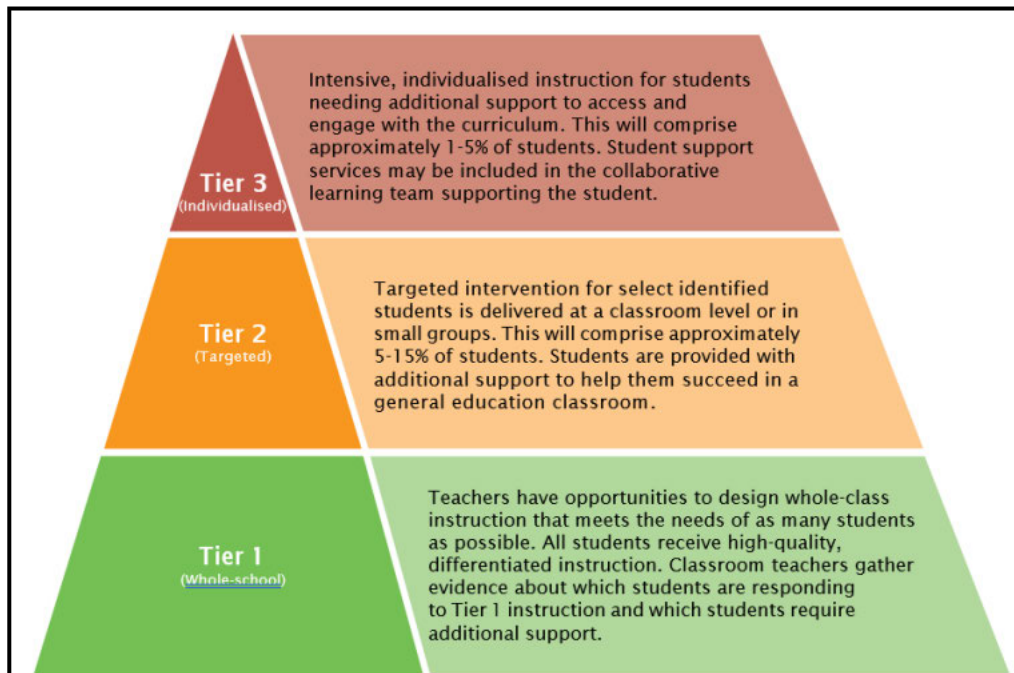
Recommendation 22: The VCAA should make it a priority to create a full suite of explicit instruction-based instructional materials, from whole-school plans for learning down to lesson-level resources, aligned to the Victorian Curriculum.

Recommendation 23: Where VCAA or related government bodies are unable to do this work, teachers and schools should be directed to organisations such as Ochre to find curriculum materials based on the explicit instruction methods.

Area 3: Provide stronger evidence-based implementation guidelines on small-group tutoring
In October 2020, the Victorian Government announced \$250 million in funding to support small-group tutoring in Victorian government and selected non-government schools. This program was extended in October 2021¹²⁰ and again in September 2022,¹²¹ with another extension announced in September 2023 to extend the program until the end of the 2025 school year. With this latest extension, the total cost of the program is estimated by the government to be approximately \$1.2 billion and to have employed over 5,400 government school tutors. At all stages of the Tutor Learning Initiative, schools have been responsible for hiring tutors to suit their school's needs.

Evidence supports small-group tutoring as a way to remediate achievement gaps for some forms of students, in what is called a Multi-Tiered System of Supports (MTSS) or Response to Intervention (RTI) model. The below representation of RTI/MTSS is from the 2023 Tutor Practice Guide¹²² from the Victorian Department of Education (the TLI is Tier 2 support).

Figure 11: Response to Intervention model created for the Tutor Learning Initiative



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There are some key requirements for effective implementation of MTSS, according to the Australian Education Research Organisation.¹²³ These are listed with discussion of how well the Victorian TLI adheres to these requirements.

1. Using proven teaching methods for all students. AERO's research shows that explicit instruction is key to developing foundational literacy and numeracy skills.¹²⁴ However, explicit instruction is not positioned by the Department as the proven and vital teaching method that it is. As explored in Sections 6 and earlier in this section, there are many areas in which curriculum and pedagogical advice from the department is at best vague or at worst misleading as to what constitutes 'proven teaching methods.' If students are not receiving effective Tier 1 classroom instruction, it increases the likelihood that some students identified for Tier 2 assistance don't need to be there. Providing more system level support and mandates for effective Tier 1 instruction will increase the likelihood that the TLI is targeted at students in most need.

2. Regular testing of all students to identify gaps in learning. All students should be tested regularly in a whole-class context to accurately identify students in need of Tier 2 support. 2023 guidelines state that students below the National Minimum Standard in NAPLAN receive first priority, followed by those at risk of doing so, as well as others who are deemed to benefit. The press release relating to the latest extension of the program states that "every student identified as 'Needing Additional Support' in the 2023 and 2024 assessments at a government school will get it", which updates the previous identification strategy for the 2024 school year. While NAPLAN is useful, it happens only every two years, there is a long lead time between tests and results, and in the meantime, schools need to rely on other assessments such as ACER's Progressive Achievement Test (PAT). Whether the assessments yield detailed enough data to support the inferences required is unclear. The AERO/Monash university review of MTSS implementation suggested Curriculum-Based Monitoring (CBM) assessment packages would be of most benefit to schools seeking to effectively identify students in need of further support. But the assessment tools provided by the Department do not align with this recommendation.

3. Delivering frequent small group or 1:1 interventions with a focus on these learning gaps. The TLI provides schools with the flexibility to provide tutor support in class, or outside class (through withdrawal, or additional scheduled sessions). Hybrid support is a combination of the two. Importantly, the TLI provides schools with full flexibility, with no indication about which methods might work better for which students. It is important to note that MTSS as examined by AERO and practised internationally does not support in-class differentiation, where certain students are selected for differentiated teaching; it is a model where students receive Tier 2 and 3 support outside, and in addition to, receiving the full suite of Tier 1 instruction. Nor does it support one method of teaching at Tier 1 and another method of teaching (e.g. explicit instruction) at Tier 2.

Tier 2 instruction commonly involves targeted, small-group intervention with ongoing monitoring of progress (Barrio et al. 2015; Berkeley et al. 2009). Tier 2 is time-limited, has clear goals and entry and exit criteria that indicate when students will no longer need support... Within RTI and MTSS, instruction across the tiers should be aligned so that Tier 2 supplements and complements Tier 1, but does not replace it (Harn et al. 2011)... Rather, the logic of RTI and MTSS is that evidence-based instruction at higher tiers should be an intensified version of Tier 1 practice, achieved by increasing the frequency and duration of instruction and reducing the group size (Harlacher et al. 2010; Lemons et al. 2014; Powell and Stecker 2014). That is, students access a higher ‘dosage’ of quality instruction.¹²⁵

By giving schools the option to implement Tier 2 support in the general education classroom, schools may be implementing neither Tier 1 nor Tier 2 support with fidelity. In the absence of published evaluations, it is difficult to know what practices are being used. However, one ‘What Works’ guide for schools about the TLI, based on its 2021 implementation, notes that 46% of primary schools used an out-of-class tutoring approach and 62% of secondary schools use a hybrid model.¹²⁶ It is unclear what proportion used a solely in-class approach to tutoring.

4. Continuous data-based tracking of student progress to ensure interventions deliver real gains. The purpose of continuous monitoring is two-fold, as it both provides clarity about whether students have met the desired instructional goals and can be removed from Tier 2 intervention, and it provides information about the effectiveness of the program for the students it is serving. While the ‘What Works’ guide notes that assessments were varied and were aligned with the 5-6 week learning cycle recommended by the Department, it’s not clear what assessments are being used, nor what impact the initiative has had.

The ‘What Works’ guide for schools reports that, according to PAT data in 2021 (the first year of the TLI), “the learning gap between TLI and non-TLI students did not widen in 2021” and suggests this is a positive outcome, given the extensive disruptions to student learning throughout 2021. Government press releases have also made mention of an evaluation (potentially several evaluations) by consultancy firm Deloitte, which have not been published. The findings of this evaluation were described in government press releases as follows:

- An independent evaluation by Deloitte concluding the initiative improved attendance, achievement, and engagement among students — and had a positive impact on their confidence (October 2021)
- An independent evaluation by Deloitte found 88% of primary school principals and 75% of secondary school principals surveyed reported improvements in students’ achievements they attributed to the tutors (September 2022)

- An independent evaluation by Deloitte found that the benefits of the Tutor Learning Initiative extended beyond academic achievement, to include improvements in student engagement and teacher practice (September 2023)

However, a generic finding that results improved for students because of the tutors, or principals reporting that they thought students' achievement improved due to the tutors, is not the same as measurable evidence of impact.

Additionally, there are other reasons to doubt all schools have the data tools and instructional capacity required to deliver high-quality Tier 2 interventions, particularly at a secondary level. AERO and ACER collaborated on a survey of school and support staff to investigate how schools identified and supported 'struggling students', students in Year 7 to 9 who lack the foundational literacy and numeracy skills to successfully engage with a secondary curriculum. The survey found staff were quite confident in the methods used to identify students, but two in five respondents (41%) reported they were not really, or not at all, confident the approach their school was taking to support students was effective.¹²⁷ Though this study was carried out nation-wide, there is no reason to think the results for Victoria would be especially different from this figure.

Without a published evaluation, it is impossible to know how individual schools are implementing intervention and what implementation models best produce success. In the absence of these evaluations being published, it is difficult to know whether this \$1.2 billion is having the intended impact. To ensure better chances of success for the initiative, the government should clearly address the quality of Tier 1 instruction, provide independent assessment measures that are more sophisticated and granular than PAT and, most critically, reform its guidelines about TLI implementation to clarify the relationship between Tier 1 and Tier 2 instruction.

Recommendation 24: Change the Tutor Learning Initiative guidelines to clarify that in-class differentiation at Tier 1 is not an example of a Tier 2 intervention.

Recommendation 25: Publish any and all evaluations that relate to the Tutor Learning Initiative to gain a clearer understanding of what models are successful.

Area 4: Expand the publication of research and evaluations to improve policy, share success and point schools in the right direction

Part of a skilled and professional workforce is the means and ability to engage with research and evaluations to help guide decision-making and change. However, very little research and evaluation commissioned by the Victorian Department of Education is currently made public. Since 2014, only four new documents of various kinds have been added to the relevant section of the website:

- the Victorian Government's submission to the 2019 review of the National Partnership on Universal Access to Early Childhood Education;
- the Victorian Government's submission to the 2017 review to Achieve Educational Excellence in Australian Schools;
- a 2017 funded study into professional learning for early childhood educators; and
- a 2017 report jointly commissioned with other states and territories into achieving educational excellence through early childhood interventions.

No research or evaluation that relates to a Victorian Department of Education program, policy or pilot has been published for access by the public since 2014. In June 2023, *The Age* reported that the

Department commissioned a report into how six individual schools shifted their practice on early literacy in conjunction with La Trobe University, but:

- it was not published by the Department;
- the study's authors were prevented from publishing in an academic journal; and
- the version that was provided to *The Age* under Freedom of Information laws was heavily redacted, including most of the findings and all the recommendations.¹²⁸

Basic data and research done in schools is generally available but difficult to locate. Currently, data relating to students, schools, expulsions and the teacher workforce are available on a webpage titled "Statistics on Victorian schools and teaching"¹²⁹, which can only be found through a complex procedure of several clicks involving both the education.vic.gov.au domain and the vic.gov.au domain. There is a separate section for Research in the Department of Education on the vic.gov.au website which contains several links to all elements of the Department's responsibilities in research, including applying for permission to conduct research in schools.¹³⁰ The public access webpage to search the Research and Evaluation Register has not been updated since 2017 and contains an outdated logo and department title.¹³¹

The lack of transparency around research and evaluation is in contrast to New South Wales, where its Centre for Education Statistics and Evaluation (NSWCESE) acts as a clearinghouse for multiple aspects of educational data and reporting. It collects and maintains data for the whole education and training sector, completes qualitative and quantitative research on evidence-based practices, trials new initiatives and evaluates key policies and programs to improve outcomes.¹³² As a one-stop-shop, it creates access to research, data and evaluation for schools, teachers, independent researchers and members of the public. A better approach to research and evaluation can provide schools with valuable opportunities to learn from the successes of demographically-similar schools and schools that have demonstrated gains for their students, as NSWCESE¹³³ and ACARA have done.¹³⁴

Recommendation 26: Create an equivalent body to NSWCESE which has responsibility for commissioning and publishing research and evaluation on all aspects of Victorian education.

8) A proactive approach to behaviour and classroom management can help promote student wellbeing

PISA surveys of the disciplinary climate in classrooms show that Australia overall is ranked 69th out of 76th within the OECD.¹³⁵ Moreover, OECD analysis finds that students in schools with greater disciplinary environments record higher achievement — with Australian students achieving around 7 months higher in PISA's reading assessment with a one-unit increase in the disciplinary index (this is approximately the difference in discipline recorded between Australia and PISA-participating Chinese provinces).¹³⁶

Low-level behaviour concerns are typically hard to measure as they manifest in disengagement and inattentiveness rather than non-compliance. Discussing a longitudinal study of students in WA he worked on, CIS contributor Tim McDonald noted 40% of students displayed unproductive behaviours regularly. Of these, "more than half were in a 'compliant disengaged' group, described by their teachers as uninterested in their schoolwork, unprepared for lessons, and quick to give up tasks they found difficult or boring. The most common unproductive behaviour identified by teachers was inattentiveness."¹³⁷ This study also found the 40% of students who displayed unproductive behaviours were on average one to two years behind peers in literacy and numeracy and that this was just as bad as those who teachers identified as actively disruptive. In other words, surveys that

seek to capture instances of misbehaviour underestimate the scale of the problem caused by inattentive behaviours and, consequently, underestimate the disruption to learning. McDonald notes further on the value of ordered classrooms for student wellbeing:

A well organised classroom is consistent. A consistent classroom is inclusive. Consistency is an important element to establish with students from day one. Knowing how the class will work and what is expected of them increases anticipation rather than anxiety about the year ahead. Students with anxiety or worries about how they will fit in or belong in a class, or a school, are reassured from day one on how the class will be structured and organised. A consistent classroom is predictable, reliable and stable because there are clear norms of behaviour, routines to follow, and rules. Coupled with this behavioural consistency is the consistency of instruction, with clear learning objectives and guidance from the teacher.

Accordingly, McDonald recommends that behaviour be explicitly incorporated into the national curriculum. While Victoria is unable to make a decision about the Australian Curriculum unilaterally, it could modify and expand its existing School Wide Positive Behaviour Support program to align with international best practice.¹³⁸

Recommendation 27: Mandate the explicit teaching of behaviour in all Victorian schools, whether that is through the Victorian Curriculum or another system-wide initiative.

A behaviour curriculum is essentially a school-based system made up of principles and practices for ensuring every student learns how to behave in a manner that is appropriate for the school environment. Tom Bennett, behaviour adviser to the British Department for Education and CIS contributor, notes in his recent paper, *Conduct Becoming*:¹³⁹

... the school has a duty to teach children the habits of conduct that will maximise their safety, their opportunity to learn, and their dignity. If they do not do this, then the following will happen: if the school largely serves demographics of children advantaged with social capital, habituated into habits of institutional success — sharing, waiting, helping, perseverance, etc., — then the school will be fortunate enough to experience high levels of compliance, and only deal with relatively minor levels of disruption. This is the case in, e.g., highly-affluent private schools, schools with small intakes, or younger children. The other thing that will happen if the school does not serve such a polished and compliant community of learners, is that misbehaviour will be high, and the school will constantly fight the same battles on a gruelling and endless basis.

The lack of clarity, predictability and routine in a school that lacks a well-implemented behaviour curriculum will not only reduce learning through reduced time-on-task, but can detract from student safety and wellbeing. Bennett notes that not all schools' behaviour curriculum will look the same, but the most successful schools that he studied looked like this:

- Clear, universally understood standards of behavioural conduct;
- Highly competent processes of staff induction and training into the above standards of behaviour;
- Relentless, implacable commitment to ensuring that all students were taught— not simply ordered— into following these standards;
- Olympian levels of consistency;
- Dedicated time allocated to the management of behaviour;
- Clear behaviour policies that were executed with high levels of fidelity;

- Massive buy-in from all staff;
- Usually, a leader with a strong sense of moral purpose, prepared to hold the line on their vision of behaviour;
- Consequence systems that were understood and implemented consistently by all staff;
- Support mechanisms for students who needed it; and
- Removal processes for students who disrupted others.

Bennett notes that whatever the standards of conduct and the mechanisms for implementing them are, consistency is key:

These behaviours are clearly taught, repeated and insisted upon, until they become habit for all students. Leaders are encouraged to define what behaviours they want everyone to perform quickly and efficiently. Once these behaviours have been defined, they can be shared, teachers trained, and then students taught to follow them. And the elegant reality of this is that students are being taught how to be successful, not just how to avoid failure. The emphasis is on what they should do, not what should not be done.

Recommendation 28: The Department should create a set of ‘Culture Principles’ which provide guidance to schools about how to create durable whole-school approaches to behaviour for learning. This should be integrated into the Victorian Teaching and Learning Model.

Bennett and McDonald also emphasise the importance of data-driven interventions and policies, both at the school and the government level. To this end, Bennett proposed and led a National Behaviour Survey, which surveyed staff and students about things such as their perception of disruption and how safe they feel, as well as frequency and impact of misbehaviour and how schools respond to it. The first round of data was released in June 2023, with some key findings for wellbeing of both staff and students:

- Health and wellbeing of 60% of teachers had been affected, with 31% to a small extent, 23% to some extent and 7% to a great extent;
- A quarter of students only felt safe at school on ‘some days’ or at no point at all in the week before they did the survey;
- On average, about six minutes for every half an hour in class was eaten up by poor behaviour; and
- More than one in five children had been a victim of bullying in the past 12 months, with the most common reason being picked on for the way they look.

Victoria and other school systems already conduct extensive surveys of staff and student attitudes to schools. However, as the next section will explore, this data is not always published in the way it should be.

9) Data about the wellbeing and school experiences of Victorian students is insufficiently transparent

As noted in Section 6, FISO 2.0 now includes ‘wellbeing’ as one of two central goals for the Victorian education system. The Department’s Annual Report tracks the following indicators in relation to wellbeing, of which ones marked in bold pertain to school-based measures:

- Proportion of children who have no behavioural issues on entry into Prep;
- Proportion of children who have no general development issues on entry into Prep;

- Children developmentally 'on track' on the AEDC social competence and emotional maturity domains;
- **Students feeling connected to their school;**
- **Students with a positive opinion about their school providing a safe and orderly environment for learning;** and
- Level of student satisfaction with VET.

Figure 12: School education wellbeing indicators as published in the Annual Report 2021-22¹⁴⁰

Indicators	Unit	2017	2018	2019	2020	2021
School education²⁰						
Students feeling connected to their school						
Proportion of Victorian government school student responses that 'agreed' or 'strongly agreed' that they feel connected to schooling						
Years 4–6	%	81.7	81.2	81.0	79.2	79.5
Years 7–9 ²¹	%	56.0	56.7	56.0	59.9	53.2
Years 10–12 ²¹	%	52.8	53.1	53.3	59.4	50.1
Students with a positive opinion about their school providing a safe and orderly environment for learning						
Proportion of Victorian government school students who say they have not been bullied recently						
Years 4–6	%	74.7	80.0	81.6	83.3	80.9
Years 7–9	%	73.3	78.8	80.5	88.2	83.4
Years 10–12	%	81.4	85.4	87.5	92.5	89.2
Proportion of Victorian government school students who 'agreed' or 'strongly agreed' that their teacher sets clear rules / manages misbehaviour effectively						
Years 4–6	%	80.1	79.9	79.8	77.0	78.6
Years 7–9	%	56.1	57.8	58.1	61.8	57.3
Years 10–12	%	56.0	56.9	57.5	62.7	57.2

Figure 12 shows the proportion of students since 2017 who feel connected to school, at all year levels, has stayed stable, as has the proportion of students who report their teacher sets rules and manages misbehaviour appropriately. Positively, there is noticeable improvement at all year levels in the proportion of students reporting they have not been bullied.

These three measures are drawn from a much larger survey called the Attitudes to School Survey (AtoSS) which was first run in its current form in 2017 and includes a whole range of questions: it measures teaching practice, teacher-student relations, learner characteristics and disposition, social engagement, student safety, experience of bullying, individual social and emotional wellbeing, physical and mental health, and emotional and relational engagement.¹⁴¹ However, data is not published at the local government area or administrative region level, which means regional variation cannot be detected.

The Victorian Government runs the Victorian Child and Adolescent Monitoring System (VCAMS) which gathers data along several metrics and from a range of sources to assist in developing policy for children and young people. The first two measures (connection to schooling and children experiencing bullying as measured by the Attitudes to School Survey) reported in the Annual Report

are also reported in VCAMS. While VCAMS is intended to report all its data by local government area in a web-based heatmap format as well as raw data in Excel, the data drawn from AtoSS have not been updated since 2018 (in the case of children experiencing bullying) and 2015 (in the case of connection to schooling), even though these data are clearly collected as part of AtoSS, available at the school level and provided statewide for the purpose of the Annual Report.

Schools can access their own data from AtoSS; a basic Google search suggests some may choose to publish it on their website for the benefit of the school community.¹⁴² But the lack of transparency around wellbeing-related measures for students means that it becomes difficult to respond with targeted policies to improve student wellbeing if data suggests that particular areas require focus. For instance, behaviour is an important aspect of student wellbeing and also of student success at schools; one study of a correlational analysis between Year 5 AtoSS data and Year 5 NAPLAN results found that the AtoSS domain which correlated mostly strongly with NAPLAN results across all domains was effective classroom behaviour. This domain covers measures such as “Students at this school treat teachers with respect”, “My teacher expects students to pay attention”, “My teacher sets clear rules for classroom behaviour” and “Students at this school treat each other with respect.”¹⁴³ As discussed in Section 6, this study also found no statistically significant correlation between academic achievement and more traditional wellbeing measures such as inclusion and connectedness. While nations such as England and, more recently, the state of NSW have appointed experts to address behaviour and classroom climate matters,¹⁴⁴ no similar step has been taken in Victoria.

The complexity and difficulty of accessing granular data relating to Victorian child and student wellbeing and experiences of school mean there is no way of adequately tracking such wellbeing as it relates to schools, no way to properly assess the wellbeing impact of phenomena such as the COVID-19 pandemic and school closures, and no way to assess whether targeted initiatives to improve student wellbeing are helping. It is also worth noting that despite the Department of Education’s decision to centre wellbeing as part of FISO 2.0 and its additional investment into student mental health,¹⁴⁵ the reportable indicators have not changed or been expanded since previous iterations.

Recommendation 29: Attitudes to School Survey data should be reported in full by Local Government Area, similar to the current reporting mechanism for VCAMS.

References

- ¹ Productivity Commission, Table 4A.10 Report on Government Services School Education Data Tables. Available from: <https://www.pc.gov.au/ongoing/report-on-government-services/2022/child-care-education-and-training/school-education>
- ² Productivity Commission, Table 4A.15 Report on Government Services School Education Data Tables
- ³ Productivity Commission, Table 4A.6, Report on Government Services School Education Data Tables
- ⁴ Figure 2.6, in Hillman, K., O’Grady, E., Rodrigues, S., Schmid, M., & Thomson, S. (2023). Progress in International Reading Literacy Study: Australia’s results from PIRLS 2021. Australian Council for Educational Research. <https://doi.org/10.37517/978-1-74286-693-2>
- ⁵ As above, Table 2.2
- ⁶ As above, Figure 2.7
- ⁷ Figure 3.7 and Table 3.2 in TIMSS 2019 Australia. Volume I: Student performance by Sue Thomson, Nicole Wernert, Sima Rodrigues and Elizabeth O’Grady (Australian Council for Educational Research) under contract with the Commonwealth of Australia as represented by the Department of Education, Skills and Employment who is the copyright owner of the material.
- ⁸ As above, Figure 3.8
- ⁹ As above, Table 3.3
- ¹⁰ As above, Figure 6.7 and Table 6.2
- ¹¹ As above, Figure 6.8
- ¹² As above, Table 6.3
- ¹³ As above, Figure 4.7 and Table 4.2
- ¹⁴ As above, Figure 4.8
- ¹⁵ As above, Table 4.3
- ¹⁶ As above, Figure 7.7 and Table 7.2
- ¹⁷ As above, Figure 7.8
- ¹⁸ As above, Table 7.3
- ¹⁹ As above, Figure 7.10
- ²⁰ Media release: Victoria Tops The Class Again In NAPLAN Results, 23 August 2023, Premier of Victoria. Available from <https://www.premier.vic.gov.au/victoria-tops-class-again-naplan-results>
- ²¹ Australian Curriculum, Assessment and Reporting Authority, NAPLAN national results 2023, available from: <https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/naplan-national-results>
- ²² Williams, L., Groves, O., Wan, W.-Y., Lee, E., & Lu, L. (2023). Learning outcomes of students with early low NAPLAN performance. Australian Education Research Organisation. <https://www.edresearch.edu.au/resources/learning-outcomes-students-early-low-naplan-performance>
- ²³ Houg, B., and Justman, M., (2014), NAPLAN scores as predictors of access to higher education in Victoria, Melbourne Institute Working Paper No. 22/14 https://melbourneinstitute.unimelb.edu.au/downloads/working_paper_series/wp2014n22.pdf and Baker, J., “Year 9 NAPLAN writing results the best predictor of HSC success: study”, The Sydney Morning Herald, 30 May 2021
- ²⁴ Australian Institute of Teaching and School Leadership, Spotlight: Australia’s teacher workforce today, September 2023. Available from: <https://www.aitsl.edu.au/research/spotlights/australia-s-teacher-workforce-today>
- ²⁵ Earp, J., Infographic: The growing problem of teacher shortages, Teacher Magazine, September 22 2023. Available from: https://www.teachermagazine.com/au_en/articles/infographic-the-growing-problem-of-teacher-shortages?utm_source=Social&utm_medium=Twitter&utm_campaign=SocialMedia
- ²⁶ OECD (2019) in Figure 21 from Fahey, G., Teacher workforce: fiction vs fact, Research Report 43, The Centre for Independent Studies, March 2022. Available from: <https://www.cis.org.au/publication/teacher-workforce-fiction-vs-fact/>
- ²⁷ OECD (2019) in Figure 22 from Fahey, G., Teacher workforce: fiction vs fact, Research Report 43, The Centre for Independent Studies, March 2022.
- ²⁸ From Figure D3.5, Change in upper secondary general teachers’ statutory salaries between 2010 and 2022, in OECD (2023), Education at a Glance 2023: OECD Indicators, OECD Publishing, Paris, <https://doi.org/10.1787/e13bef63-en>.

-
- ²⁹ Media release: Streamlining Teacher Recruitment In Schools, 31 August 2023, Premier of Victoria. Available from: <https://www.premier.vic.gov.au/streamlining-teacher-recruitment-victorian-schools>
- ³⁰ Australian Government, Department of Education, Skills and Employment, *Research into initiatives to prepare and supply a workforce for hard-to-staff schools*, August 2021, pp. 67-68, available from [https://fusecontent.education.vic.gov.au/89988fd6-fcba-44e7-9f10-ed6bfc6f0006/Research%20into%20initiatives%20to%20prepare%20and%20supply%20a%20workforce%20for%20hard%20to%20staff%20schools%20\(002\).pdf](https://fusecontent.education.vic.gov.au/89988fd6-fcba-44e7-9f10-ed6bfc6f0006/Research%20into%20initiatives%20to%20prepare%20and%20supply%20a%20workforce%20for%20hard%20to%20staff%20schools%20(002).pdf)
- ³¹ Roberts, P. and Downes, N., Incentivising the profession: A national mapping of incentives to attract and retain staff in Australian non-metropolitan communities, September 2020. Available from <https://core.ac.uk/download/pdf/334439353.pdf>
- ³² Burke, Paul F., and Buchanan, John. (2022). "What Attracts Teachers to Rural and Remote Schools? Incentivizing Teachers' Employment Choices in New South Wales", *Australian Journal of Education*, forthcoming. <https://journals.sagepub.com/home/aed>
- ³³ <https://education.nsw.gov.au/about-us/strategies-and-reports/teacher-supply-strategy>
- ³⁴ Legislative Council (NSW) Portfolio Committee No. 3, Great teachers, great schools: Lifting the status of teaching, teacher quality and teacher numbers in New South Wales – Report of the inquiry into teacher shortages in New South Wales. Report 48, November 2022 <https://www.parliament.nsw.gov.au/lcdocs/inquiries/2882/Report%20No.48%20-%20PC%203%20-%20Teacher%20Shortages%20in%20NSW.pdf>
- ³⁵ Sims, S. and Benhenda, A. (2022). The effect of financial incentives on the retention of shortage-subject teachers: evidence from England, Working Paper No. 22-04, Centre for Education Policy and Equalising Opportunities, University College London
- ³⁶ Farquharson, C.; Phelan, D.; Sibieta, L.; and Tahir, I. (2023). Teacher recruitment, training and retention: submission to the Education Select Committee, Institute for Fiscal Studies.
- ³⁷ Sims, S. and Benhenda, A. (2022). The effect of financial incentives on the retention of shortage-subject teachers: evidence from England, Working Paper No. 22-04, Centre for Education Policy and Equalising Opportunities, University College London.
- ³⁸ Media release: Making Teaching Free to Back Our School Workforce, 12 September 2023, Premier of Victoria. Available from: <https://www.premier.vic.gov.au/making-teaching-free-back-our-school-workforce>
- ³⁹ Fahey, G. and Joseph, R., Starting off on the wrong foot: How to improve initial teacher education in Australia, Analysis Paper 53, August 2023 <https://www.cis.org.au/publication/starting-off-on-the-wrong-foot-how-to-improve-initial-teacher-education-in-australia/>
- ⁴⁰ Victorian Institute of Teaching, PRT Guide: Moving from provisional to full registration, last updated 31 January 2023. Available from: https://www.vit.vic.edu.au/sites/default/files/media/pdf/2023-02/Document_PRT-Guide_Moving-from-provisional-to-full-registration.pdf
- ⁴¹ Kane, T. J., Rockoff, K. E.; Staiger, D. O. (2008). What does certification tell us about teacher effectiveness? Evidence from New York City, *Economics of Education Review*, 27 (6), pp. 615- 631
- ⁴² Timperley, H., Using assessment data for improving teaching practice, 2009. Available from: https://research.acer.edu.au/cgi/viewcontent.cgi?referer=https://scholar.google.com.au/&httpsredir=1&article=1036&context=research_conference
- ⁴³ Hunter, J., Haywood, A., and Parkinson, N. (2022). Ending the lesson lottery: How to improve curriculum planning in schools. Grattan Institute. Available from: <https://grattan.edu.au/report/ending-the-lesson-lottery-how-to-improve-curriculum-planning-in-schools/>
- ⁴⁴ Armytage, P., Review of the Victorian Institute of Teaching – Final Report, 1 December 2017. Available from: <https://www.education.vic.gov.au/Documents/about/departments/ReviewoftheVictorianInstituteofTeaching.pdf>
- ⁴⁵ Victorian Institute of Teaching, Registration categories: Permission to Teach. Available from: <https://www.vit.vic.edu.au/register/categories/ptt> and NSW Education Standards Authority (NESA), Getting accredited for the first time. Available from: <https://educationstandards.nsw.edu.au/wps/portal/nesa/teacher-accreditation/apply/first-time-accreditation>
- ⁴⁶ Victorian Institute of Teaching, Registration categories: Permission to Teach. Available from: <https://www.vit.vic.edu.au/register/categories/ptt>
- ⁴⁷ Legislative Council (NSW) Portfolio Committee No. 3, Great teachers, great schools: Lifting the status of teaching, teacher quality and teacher numbers in New South Wales – Report of the inquiry into teacher

shortages in New South Wales. Report 48, November 2022

<https://www.parliament.nsw.gov.au/lcdocs/inquiries/2882/Report%20No.48%20-%20PC%203%20-%20Teacher%20Shortages%20in%20NSW.pdf>

⁴⁸ New South Wales Education Standards Authority (NESA), Applying for Proficient Teacher Accreditation Procedure: Interim arrangements for early childhood teachers, accreditation supervisors and employers, November 2022. Available from: <https://educationstandards.nsw.edu.au/wps/wcm/connect/52597cae-824e-4ebf-bcf3-f37a428571a4/applying-for-proficient-teacher-accreditation-procedure-early-childhood.pdf?MOD=AJPERES&CVID=>

⁴⁹ Victorian Institute of Teaching, PRT Guide: Moving from provisional to full registration, last updated 31 January 2023. Available from: https://www.vit.vic.edu.au/sites/default/files/media/pdf/2023-02/Document_PRT-Guide_Moving-from-provisional-to-full-registration.pdf p. 23

⁵⁰ Department of Education (Victoria), Teacher tip: Peer, observation, feedback and reflection. Available from: <https://www.schools.vic.gov.au/teacher-tip-peer-observation-feedback-and-reflection>

⁵¹ Taylor, E.S. and Tyler, J.H., The effect of evaluation on performance: evidence from longitudinal student achievement data of mid-career teachers, NBER Working Paper 16877. Available from: https://www.nber.org/system/files/working_papers/w16877/w16877.pdf

⁵² Department of Education (Australia), National Teacher Workforce Action Plan, December 2022. Available from: <https://www.education.gov.au/teaching-and-school-leadership/resources/national-teacher-workforce-action-plan>

⁵³ Sims, S.; Fletcher-Wood, H.; O'Mara-Eves, A.; Cottingham, S.; Stansfield, C.; Goodrich, J.; van Herwegen, J.; and Anders, J. (2022). *Effective teacher professional development: new theory and a meta-analytic test*, EdWorkingPaper, 22- 507. Annenberg Institute at Brown University.

⁵⁴ Coe, R., et al, "What makes great teaching? Review of the underpinning research" Sutton Trust, October 2014. Available from: <https://www.suttontrust.com/wp-content/uploads/2014/10/What-Makes-Great-Teaching-REPORT.pdf>

⁵⁵ Department of Education (Victoria), Policy and Advisory Library: Performance and development for teacher class employees. Available from: <https://www2.education.vic.gov.au/pal/performance-and-development-teacher-class-employees/overview>

⁵⁶ Department of Education (Victoria), Policy and Advisory Library: 2023 Statement of Expectation for teacher class employees. Available from: <https://www2.education.vic.gov.au/pal/performance-and-development-teacher-class-employees/policy-and-guidelines/2023-statement>

⁵⁷ Victorian Institute of Teaching, Professional practice and learning requirements: maintain my registration. Available from: <https://www.vit.vic.edu.au/maintain/requirements>

⁵⁸ OECD (2014). TALIS 2013 Results: An International Perspective on Teaching and Learning, OECD Publishing, Paris.

⁵⁹ NSW Audit Office (2019). Ensuring teaching quality in NSW public schools, 26 September 2019.

⁶⁰ NSW Education Standards Authority (NESA), Professional development requirements. Available from: <https://educationstandards.nsw.edu.au/wps/portal/nesa/teacher-accreditation/professional-development/pd-requirements>

⁶¹ Media release: Making Teaching Free to Back Our School Workforce, 12 September 2023, Premier of Victoria. Available from: <https://www.premier.vic.gov.au/making-teaching-free-back-our-school-workforce>

⁶² Dallas Independent School District, TEI Teacher Guidebook 2020-2021, February 2021. Available from <https://www.nctq.org/dmsView/TEI-Teacher-Guidebook-2020-2021-v3February2021>

⁶³ As above, pp. 29-30

⁶⁴ As above, p. 32

⁶⁵ Hanushek, E., et al, The effects of comprehensive educator evaluation and pay reform on achievement, NBER Working Paper 31073 https://www.nber.org/system/files/working_papers/w31073/w31073.pdf p. 4

⁶⁶ Hanushek, E., et al, The effects of comprehensive educator evaluation and pay reform on achievement, NBER Working Paper 31073 https://www.nber.org/system/files/working_papers/w31073/w31073.pdf p. 4

⁶⁷ Anne Wicks and William McKenzie, Accelerating Excellence in Texas Schools: How the 'ACE' Initiative Is Changing the Way Dallas Evaluates Its Teachers and Empowers Students with Data-Driven Instruction, September 22, 2019. Available from: <https://www.the74million.org/article/accelerating-excellence-in-texas-schools-how-the-ace-initiative-is-changing-the-way-dallas-evaluates-its-teachers-and-empowers-students-with-data-driven-instruction/>

-
- ⁶⁸ Dee, T., and Wyckoff, J. (2017). A Lasting Impact: High-stakes teacher evaluations drive student success in Washington, D.C. *Education Next*, 17(4), 58-66. Available from: <https://www.educationnext.org/a-lasting-impact-high-stakes-teacher-evaluations-student-success-washington-dc/>
- ⁶⁹ Dee, T., and Wyckoff, J. Incentives, selection and teacher performance: evidence from IMPACT. NBER Working Paper 19529, October 2013. https://www.nber.org/system/files/working_papers/w19529/w19529.pdf p. 10
- ⁷⁰ District of Columbia Public Schools (DCPS), IMPACT: The DCPS Evaluation and Feedback System for School-Based Personnel. Available from: <https://dcps.dc.gov/page/impact-dcps-evaluation-and-feedback-system-school-based-personnel>
- ⁷¹ District of Columbia Public Schools (DCPS), The DCPS Essential Practices, Grades 1-12, IMPACT. Available from: https://dcps.dc.gov/sites/default/files/dc/sites/dcps/page_content/attachments/The%20DCPS%20Essential%20Practices.pdf
- ⁷² Dee, T., and Wyckoff, J. Incentives, selection and teacher performance: evidence from IMPACT. NBER Working Paper 19529, October 2013. https://www.nber.org/system/files/working_papers/w19529/w19529.pdf and Dee, Thomas S., Jessalynn James, and James Wyckoff. (2019). Is Effective Teacher Evaluation Sustainable? Evidence from DCPS. (EdWorkingPaper: 19-166). Retrieved from Annenberg Institute at Brown University: <http://www.edworkingpapers.com/ai19-166>
- ⁷³ Adnot, M., Dee, T., Katz, V. and Wyckoff, J., Teacher Turnover, Teacher Quality, and Student Achievement in DCPS, Educational Evaluation and Policy Analysis March 2017, Vol. 39, No. 1, pp. 54–76. Available from: <https://files.eric.ed.gov/fulltext/ED577321.pdf>
- ⁷⁴ Campbell, C.M. et al, Perspectives on DCPS IMPACT Teacher Evaluation System: Findings from Teachers and School Leaders, American University School of Education. Available from: https://dcps.dc.gov/sites/default/files/dc/sites/dcps/page_content/attachments/American-University-School-of-Education-Report-for-DCPS_FINAL.pdf
- ⁷⁵ Department of Education (Victoria), Policy and Advisory Library: Framework for Improving Student Outcomes (FISO 2.0). Available from: <https://www2.education.vic.gov.au/pal/fiso/policy>
- ⁷⁶ Turner, K and Pale, M, The relationship between student attitudes to school survey results and NAPLAN results, *Issues in Educational Research*, 29(1), 2019 <https://www.iier.org.au/iier29/turner.pdf>
- ⁷⁷ [Visible Learning, Hattie Ranking – Interactive Visualisation](https://visible-learning.org/nvd3/visualize/hattie-ranking-interactive-2009-2011-2015.html). Available from: <https://visible-learning.org/nvd3/visualize/hattie-ranking-interactive-2009-2011-2015.html>
- ⁷⁸ Willingham, D., Ask the cognitive scientist: What is developmentally appropriate practice? *American Educator*, Summer 2008. Available from: <https://www.aft.org/ae/summer2008/willingham>
- ⁷⁹ Simpson, A., The misdirection of public policy: comparing and combining standardised effect sizes, Durham University. Available from <https://durham-repository.worktribe.com/preview/1367541/20605.pdf>
- ⁸⁰ Australian Education Research Organisation (AERO), How students learn best: an overview of evidence from cognitive science and the most effective teaching practices, September 2023. Available from: <https://www.edresearch.edu.au/resources/how-students-learn-best>
- ⁸¹ Rosenshine, B., Principles of Instruction: Research-based strategies that all teachers should know. *American Educator*, Spring 2012. Available from: <https://www.aft.org/sites/default/files/Rosenshine.pdf>
- ⁸² Churchill, R., et al, *Teaching: Making a Difference*, 2nd edition. John Wiley & Sons Australia, 2013.
- ⁸³ Department of Education (Victoria), e5 poster, n.d. Available from: <https://www.education.vic.gov.au/Documents/school/principals/curriculum/e5a1poster.pdf>
- ⁸⁴ Sweller, J., Why inquiry-based approaches harm students' learning, Analysis Paper 24, The Centre for Independent Studies, August 2021 and Kirschner, P. Clark, R.E., and Sweller, J. (2006), Why minimal guidance during instruction does not work, *Educational Psychologist*, 41(2), 75–86, 2006.
- ⁸⁵ Department of Education (Australia), Strong Beginnings: Report of the Teacher Education Expert Panel, July 2023. Available from: <https://www.education.gov.au/quality-initial-teacher-education-review/resources/strong-beginnings-report-teacher-education-expert-panel> P. 9
- ⁸⁶ Catholic Education Archdiocese of Canberra & Goulburn, Catalyst: An evidence-based teaching approach. Available from: https://catalyst.cg.catholic.edu.au/wp-content/uploads/2023/07/Catalyst-Brochure_2023_vF2.pdf
- ⁸⁷ Department of Education (Victoria), Victorian Schools: Summary Statistics 2023. Available from: <https://www.education.vic.gov.au/Documents/about/department/summarystatssnapshot.pdf>

-
- ⁸⁸ NSW Department of Education, Centre for Education Statistics and Evaluation, What works best: 2020 Update, April 2020. Available from: <https://education.nsw.gov.au/about-us/education-data-and-research/cese/publications/research-reports/what-works-best-2020-update>
- ⁸⁹ Department of Education (Victoria), 2023 Attitudes To School Survey Framework. Available from: <https://www2.education.vic.gov.au/pal/data-collection-surveys/guidance/attitudes-school-survey>
- ⁹⁰ Victorian Curriculum and Assessment Authority (VCAA), Victorian Curriculum F-10: Revised curriculum planning and reporting guidelines. Available from: <https://www.vcaa.vic.edu.au/Documents/viccurric/RevisedF-10CurriculumPlanningReportingGuidelines.pdf> pp 6-8
- ⁹¹ Victorian Curriculum and Assessment Authority (VCAA), Victorian Curriculum F-10: Revised curriculum planning and reporting guidelines. Available from: <https://www.vcaa.vic.edu.au/Documents/viccurric/RevisedF-10CurriculumPlanningReportingGuidelines.pdf> p. 9
- ⁹² Victorian Curriculum and Assessment Authority (VCAA), Victorian Curriculum F-10: Revised curriculum planning and reporting guidelines. Available from: <https://www.vcaa.vic.edu.au/Documents/viccurric/RevisedF-10CurriculumPlanningReportingGuidelines.pdf> p. 11
- ⁹³ Department of Education (Victoria), Designing Foundation to Year 2 literacy lessons. Available from: <https://www.education.vic.gov.au/school/teachers/teachingresources/discipline/english/Pages/designing-foundation-to-year-2-literacy-lessons.aspx>
- ⁹⁴ Department of Education (Victoria), Designing Foundation to Year 2 literacy lessons. Available from: <https://www.education.vic.gov.au/school/teachers/teachingresources/discipline/english/Pages/designing-foundation-to-year-2-literacy-lessons.aspx>
- ⁹⁵ Department of Education (Victoria), Literacy Teaching Toolkit Map – Foundation to Level 6. Available from: <https://www.education.vic.gov.au/Documents/school/teachers/teachingresources/discipline/english/literacy/literacy-teaching-toolkit-map-v4.pdf>
- ⁹⁶ Department of Education (Victoria), Literacy Teaching Toolkit: Phonics. Available from: <https://www.education.vic.gov.au/school/teachers/teachingresources/discipline/english/literacy/readingviewing/Pages/litfocusphonics.aspx>
- ⁹⁷ Freebody, P. and Luke, A. (1990), Literacies programs: Debates and demands in cultural context. *Prospect: an Australian journal of TESOL*, 5(3), pp. 7-16. <https://eprints.qut.edu.au/49099/7/DOC090312.pdf>
- ⁹⁸ De Bruin et al., There are definitely better ways to teach reading, *Nomanis Issue 13*, August 2022. Available from: https://multilit.com/wp-content/uploads/2022/08/NOMANIS13-AUG22_DEBRUIN-ET-AL.pdf
- ⁹⁹ Hordacre et al., Evaluation of the trial of the UK Phonics Screening Check in South Australian Schools, Australian Industrial Transformation Institute, December 2017. Available from: https://www.education.sa.gov.au/docs/curriculum/evaluation-uk-phonics-screening-check-sa.pdf?acsf_files_redirect
- ¹⁰⁰ SA Department of Education, Phonics screening check for student understanding of letters and sounds. Available from: <https://www.education.sa.gov.au/parents-and-families/curriculum-and-learning/literacy-and-numeracy/phonics-screening-check-student-understanding-letters-and-sounds>
- ¹⁰¹ Primary Focus, South Australian Literacy Guarantee: A comprehensive approach to literacy improvement education systems in Australia. Available from: <https://www.primaryfocus.org.au/case-studies/south-australia-literacy-guarantee>
- ¹⁰² SA Department of Education, 2018 Phonics Screening Check Fact Sheet. Available from: <https://www.education.sa.gov.au/docs/curriculum/2018-phonics-screening-check-fact-sheet.pdf>
- ¹⁰³ SA Department of Education, 2022 Phonics Screening Check Fact Sheet. <https://www.education.sa.gov.au/docs/curriculum/2022-phonics-screening-check-results-fact-sheet.pdf>
- ¹⁰⁴ NSW Department of Education, Centre for Education Statistics and Evaluation, Phonics Screening Check <https://education.nsw.gov.au/content/dam/main-education/about-us/educational-data/cese/2020-phonics-screening-check.pdf>
- ¹⁰⁵ NSW Department of Education, Centre for Education Statistics and Evaluation, Year 1 Phonics Screening Check 2022 update. Available from: <https://education.nsw.gov.au/about-us/education-data-and-research/cese/publications/research-reports/phonics-screening-check-2022>
- ¹⁰⁶ Literacy Advisory Panel, Final Report to Government: Lifting Literacy, May 2023. Available from: https://www.dpac.tas.gov.au/_data/assets/pdf_file/0027/297711/Final-Report-to-Government-Literacy-Advisory-Panel.pdf

-
- ¹⁰⁷ Rob Inglis, NAPLAN 2023: Data shows Tasmanian students lagging behind interstate counterparts, *The Mercury*, 24 August 2023. Available from: <https://www.themercury.com.au/news/tasmania/naplan-2023-data-shows-tasmanian-students-lagging-behind-interstate-counterparts/news-story/02485e1c21cbc3a797257d3c79223b7d>
- ¹⁰⁸ Tanya Plibersek, Doorstop Interview Transcript, 21 April 2021. Available from: <https://www.tanyaplibersek.com/media/transcripts/transcript-tanya-plibersek-doorstop-interview-hobart-wednesday-21-april-2021/>
- ¹⁰⁹ WA Department of Education, Phonics Initiative. Available from: <https://www.education.wa.edu.au/phonics-initiative>
- ¹¹⁰ Media release: Victorian Kids Benefit From Early Literacy Assessments, Premier of Victoria, 20 March 2023 <https://www.premier.vic.gov.au/victorian-kids-benefit-early-literacy-assessments>
- ¹¹¹ Robyn Grace, The 'hopeless' phonics test failing Victorian students but costing millions, *The Age*, 28 August 2023. Available from: <https://www.theage.com.au/national/victoria/the-hopeless-phonics-test-failing-victorian-students-but-costing-millions-20230826-p5dzoh.html>
- ¹¹² Victorian Curriculum and Assessment Authority (VCAA), Examples of Whole-School Curriculum Plans. Available from: <https://www.vcaa.vic.edu.au/curriculum/foundation-10/curriculumplanning/Pages/Examples.aspx>
- ¹¹³ Victorian Curriculum and Assessment Authority (VCAA), Mathematics Version 2.0 <https://victoriancurriculum.vcaa.vic.edu.au/mathematics/mathematics-version-2-0/curriculum/f-10>
- ¹¹⁴ Victorian Curriculum and Assessment Authority (VCAA), Mathematics Scope and Sequence <https://victoriancurriculum.vcaa.vic.edu.au/mathematics/mathematics/introduction/scope-and-sequence>
- ¹¹⁵ Hunter, J., Haywood, A., and Parkinson, N. (2022). Ending the lesson lottery: How to improve curriculum planning in schools. Grattan Institute. Available from: <https://grattan.edu.au/report/ending-the-lesson-lottery-how-to-improve-curriculum-planning-in-schools/> p. 3
- ¹¹⁶ Ochre Education, About Ochre. Available from: <https://ochre.org.au/about-ochre/>
- ¹¹⁷ Media release: AERO and Ochre Education launch free teaching resources to help return to school. 3 February 2022. Available from: <https://www.edresearch.edu.au/articles/aero-and-ochre-education-launch-free-teaching-resources-help-return-school>
- ¹¹⁸ Media release: A new partnership with the National Catholic Education Commission (NCEC), 5 September 2023. Available from: <https://ochre.org.au/a-new-partnership-with-the-national-catholic-education-commission-ncec/>
- ¹¹⁹ Ochre Education, Find lessons. Available from: <https://ochre.org.au/teacher-hub/find-lessons/>
- ¹²⁰ Media release: Tutor program to continue in Victorian schools, Premier of Victoria. 4 October 2021. Available from: <https://www.premier.vic.gov.au/tutor-program-continue-victorian-schools>
- ¹²¹ Media release: Tutors to continue supporting students in our schools, Premier of Victoria. 14 September 2022 <https://www.premier.vic.gov.au/tutors-continue-supporting-students-our-schools>
- ¹²² Victorian State Government, Department of Education, *Tutor Learning Initiative: 2023 Tutor Practice Guide*, available from <https://www.education.vic.gov.au/PAL/TLI-tutor-practice-guide.pdf>
- ¹²³ Australian Education Research Organisation (AERO), Supporting secondary students lacking foundational literacy and numeracy skills: research summary, May 2023. Available from: <https://www.edresearch.edu.au/resources/supporting-secondary-students-lacking-foundational-literacy-and-numeracy-skills-research-summary>
- ¹²⁴ Adam Inder, Tiered literacy and numeracy interventions. Australian Education Research Organisation (AERO), 29 May 2023. Available from: <https://www.edresearch.edu.au/articles/tiered-literacy-and-numeracy-interventions>
- ¹²⁵ de Bruin K, Kestel E, Francis M, Forgasz H and Fries R (2023), Supporting students significantly behind in literacy and numeracy: a review of evidence-based approaches, <https://www.edresearch.edu.au/sites/default/files/2023-05/aero-supporting-students-significantly-behind-literacy-numeracy.pdf> p. 24
- ¹²⁶ Victorian State Government, Department of Education and Training, *Tutor Learning Initiative (TLI) – What works? Implementation insights for 2022*, available from <https://www2.education.vic.gov.au/pal/tutor-learning-initiative/resources>
- ¹²⁷ Weldon, P. R., Heard, J., Thompson, J., & Stephenson, T. (2023). Implementing effective tiered interventions in secondary schools: Survey of school and support staff. Australian Education Research Organisation (AERO).

<https://www.edresearch.edu.au/resources/implementing-effective-tiered-interventions-secondary-schools-survey-school-and-support-staff>

¹²⁸ Adam Carey, Department blocks 'good news story' on schools' reading transformation. The Age, 25 June 2023 <https://www.theage.com.au/national/victoria/departments-blocks-good-news-story-on-schools-reading-transformation-20230622-p5dii6.html>

¹²⁹ Victorian Government, Statistics on Victorian schools and teaching. Available from: <https://www.vic.gov.au/statistics-victorian-schools-and-teaching>

¹³⁰ Victorian Government, Research: Department of Education. Available from: <https://www.vic.gov.au/research-department-education>

¹³¹ State of Victoria (Department of Education and Training). Available from: <https://www.education.vic.gov.au/ResearchRegister/PublicS.aspx>

¹³² NSW Department of Education. Centre for Education Statistics and Evaluation, About CESE. Available from: <https://education.nsw.gov.au/about-us/education-data-and-research/cese/about-cese>

¹³³ NSW Department of Education. Centre for Education Statistics and Evaluation, Using value-added measures to identify school contributions to student learning, December 2014. Available from: <https://education.nsw.gov.au/about-us/education-data-and-research/cese/publications/research-reports/value-added-measures-to-identify-school-contributions-to-student>

¹³⁴ Australian Curriculum, Assessment and Reporting Authority (ACARA), Case studies of high gain schools. Available from: <https://www.acara.edu.au/reporting/my-school-website/case-studies-of-high-gain-schools>

¹³⁵ OECD (2019). PISA 2018 Results – Volume III. Table III B1.3.1.

¹³⁶ OECD (2019). PISA 2018 Results – Chapter 3.

¹³⁷ McDonald, T., Teaching Behaviour: How classroom conduct can unlock better learning, Analysis Paper 55, The Centre for Independent Studies, September 2023. Available from: <https://www.cis.org.au/publication/teaching-behaviour-how-classroom-conduct-can-unlock-better-learning/>

¹³⁸ Department of Education (Victoria), Policy and Advisory Library: School-wide positive behaviour support framework. Available from: <https://www2.education.vic.gov.au/pal/behaviour-students/guidance/5-school-wide-positive-behaviour-support-swpbs-framework>

¹³⁹ Bennett, T., Conduct Becoming: The importance of the behaviour curriculum, Analysis Paper 56, The Centre for Independent Studies. Available from: <https://www.cis.org.au/publication/conduct-becoming-the-importance-of-the-behaviour-curriculum/>

¹⁴⁰ Department of Education (Victoria), Annual Report 2021-22. Available from: [https://content.vic.gov.au/sites/default/files/2022-](https://content.vic.gov.au/sites/default/files/2022-09/departments_of_education_and_training_annual_report_2021-22_0.pdf)

[09/departments_of_education_and_training_annual_report_2021-22_0.pdf](https://content.vic.gov.au/sites/default/files/2022-09/departments_of_education_and_training_annual_report_2021-22_0.pdf) p 29

¹⁴¹ Department of Education (Victoria), 2023 Attitudes To School Survey Framework. Available from: <https://www2.education.vic.gov.au/pal/data-collection-surveys/guidance/attitudes-school-survey>

¹⁴² Hoppers Crossing Secondary College in the Werribee area published its 2019 school report <https://www.hopcross.vic.edu.au/wp-content/uploads/2019/08/2019-Student-Attitudes-to-School-Survey.pdf>

¹⁴³ Turner, K and Pale, M, The relationship between student attitudes to school survey results and NAPLAN results, Issues in Educational Research, 29(1), 2019 <https://www.iier.org.au/iier29/turner.pdf>

¹⁴⁴ Lucy Carroll, NSW appoints school behaviour adviser to tackle worsening student conduct, The Sydney Morning Herald, 2 March 2023. Available from: <https://www.smh.com.au/national/nsw/nsw-appoints-schools-behaviour-adviser-to-tackle-worsening-student-conduct-20230301-p5coos.html>

¹⁴⁵ Media release: More mental health support for schools, Premier of Victoria, 8 October 2022 <https://www.premier.vic.gov.au/more-mental-health-support-schools>